

Technics[®]

CD Stereo System SC-CH730

Operating Instructions



Note:

The "EB" indication shown on the outside packing case indicates United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely.

EB

COMPACT
disc
DIGITAL AUDIO

RQT3119-B

Dear customer

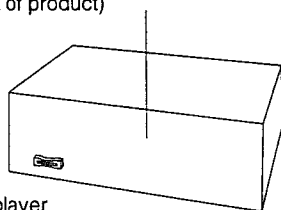
Thank you for purchasing this system.
For optimum performance and safety, please read these instructions carefully.

These operating instructions are applicable to the following systems.

System	Amplifier	Tuner/ sound processor	CD player	Cassette deck	Speakers
SC-CH730	SE-CH730	ST-CH730	SL-CH530	RS-CH730	SB-CH730
					SB-S730



(Back of product)



CD player

DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING. UNNGÅ DIREKTE EKSPOSISJON FOR STRÅLING.
VARO!	AVATTAESSA JA SUJALUKUTUS OHITETTAESSA OLET ALTITIMIA NÄKYMÄTÖNTÄ LASERSÄTEILYLLÄ. ÄLÄ KATSO SÄTEESSEEN.
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRÄKTA ELSÄRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNEES OG SIKKERHEDSGLAS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WEHN ABDECKUNG GEÖFFNET NICHT DEM STRAHLE AUSSETZEN.

(Inside of product)

(Indersiden at apparatet)

(Tuotteen sisällä)

(Apparatens insida)

(Produktets insida)

(Im Inneren des Gerätes)

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Suggestions for Safety

■ Use a standard AC wall outlet

1. Use from an AC power source of high voltage, such as that used for an air conditioner, is very dangerous.
A fire might be caused by such a connection.
2. A DC power source cannot be used.
Be sure to check the power source carefully, especially on a ship or other place where DC is used.

■ Grasp the plug when disconnecting the power supply cord

1. Wet hands are dangerous.
A dangerous electric shock may result if the plug is touched by wet hands.
2. Never place heavy items on top of the power supply cord, nor force it to bend sharply.

■ Place the unit where it will be well ventilated

Place this unit at least 10 cm (4") away from wall surfaces, etc.
Be careful that curtains and similar materials do not obstruct the ventilation holes.

■ Avoid places such as the following:

In direct sunlight or in other places where the temperature is high.

In places where there is excessive vibration or humidity.

Such conditions might damage the cabinet and/or other component parts and thereby shorten the unit's service life.

■ Be sure to place the unit on a flat, level surface

If the surface is inclined, a malfunction may result.

■ Never attempt to repair nor reconstruct this unit

A serious electric shock might occur if this unit is repaired, disassembled or reconstructed by unauthorized persons, or if the internal parts are accidentally touched.

■ Take particular care if children are present

Never permit children to put anything, especially metal, inside this unit. A serious electric shock or malfunction could occur if articles such as coins, needles, screwdrivers, etc. are inserted through the ventilation holes, etc. of this unit.

■ If water is spilled on the unit

Be extremely careful if water is spilled on the unit, because a fire or serious electric shock might occur. Immediately disconnect the power cord plug, and consult with your dealer.

■ Avoid spray-type insecticides

Insecticides might cause cracks or "cloudiness" in the cabinet and plastic parts of this unit. The gas used in such sprays might, moreover, be ignited suddenly.

■ Never use alcohol or paint thinner

These and similar chemicals should never be used, because they might cause flaking or cloudiness of the cabinet finish.

■ Disconnect the power supply cord if the unit will not be used for a long time

If the unit is left for a long time with the power ON, this not only will shorten its useful operation life, but also may cause other trouble.

■ If trouble occurs

If, during operation, the sound is interrupted or indicators no longer illuminate, or if an abnormal odour or smoke is detected, immediately disconnect the power cord plug, and contact with your dealer or an Authorized Service Center.

Table of Contents

Before use

Caution for AC Mains Lead	4
Preparing for the Remote Control	5
Installation	5
Connections	6
Location of Controls	10
Setting the Time	12
Memory Presetting	13
Automatic memory presetting	13
Manual memory presetting	14

Radio operations

Listening to Radio Broadcasts	15
Manual tuner operation	15
Memory tuner operation	15
Monaural reception with the FM stereo mode	15
Enjoying RDS Broadcast	16
What is RDS (Radio Data System)?	16
Functions of this system which use RDS	16
To display the name of a broadcast station	16
To listen to a program of a particular type, such as news or sport (PTY search)	17
About the PTY display	17

Compact disc operations

Listening to Compact Discs	18
Sequential play	18
Direct access play	20
Random play	20
Program play	21

Tape deck operations

Listening to Tapes	22
Playback	22
Sequential playback among 2 tapes	23

Convenient functions

Convenient Functions	24
Easy play	24
To mute the volume	24
To adjust the left-right volume balance	24

Recording operations

For Your Recording	24
To take up the leader tape	24
To erase a recorded sound	24
Making a Recording from Radio Broadcasts	25
For Your Recording from Compact Discs	26
Recording from Compact Discs	27
Synchro recording	27
One-touch editing preparation	28
To start one-touch editing	28
Linking up several discs (LINK)	29
Tape-to-Tape Recording	30

Tone quality operations

Changing the Tone	31
To retrieve the equalization curves and simulated listening environments	31
To listen with augmented bass (V. BASS)	31
To obtain even higher quality sound from a CD or other source	31
Using the Dolby Pro-Logic Surround	32
SURROUND	32
3 STEREO	32
Setting the center mode	32
Adjusting speaker output level	33
Adjusting the delay time	33
Enjoying with SURROUND or 3 STEREO	33

Timer operations

Using the Timer	34
Setting the play timer	34
Setting the record timer	36
To use the sleep timer	38
To use each timer mode in conjunction	38

Other functions

Enjoying the Microphone Mixing	39
Using an External Unit	40
To use headphones	40
Listening to an external source	40
Recording from an external source	40
Recording on an external unit	40

Reference

Quick Reference of Remote Control Operations	41
Concerning Compact Discs	44
Concerning Cassette Tapes	44
Troubleshooting Guide	45
Maintenance	46
Technical Specifications	47

Supplied accessories

AC mains lead (RJA0042-P or VJA0733)	1 pc.
Remote control transmitter (RAK-CH740WH)	1 pc.
Flat cable (long) (REX0661)	1 pc.
Flat cable (medium) (REX0660)	1 pc.
Flat cable (short) (REX0608)	1 pc.

AM loop antenna, antenna holder, screw (RSA0012)	1 pc.
FM indoor antenna (RSA0007)	1 pc.
Antenna plug adaptor (SJP9009)	1 pc.
Speaker cords (REE0393)	2 pcs.
Surround speaker cords (RFA0624-K)	2 pcs.
Remote control batteries (R03, UM-4)	2 pcs.

Caution for AC Mains Lead

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

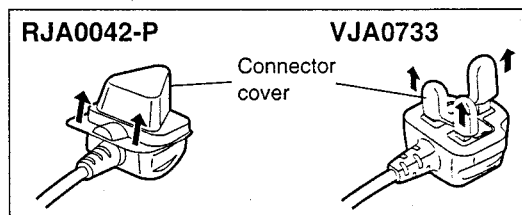
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

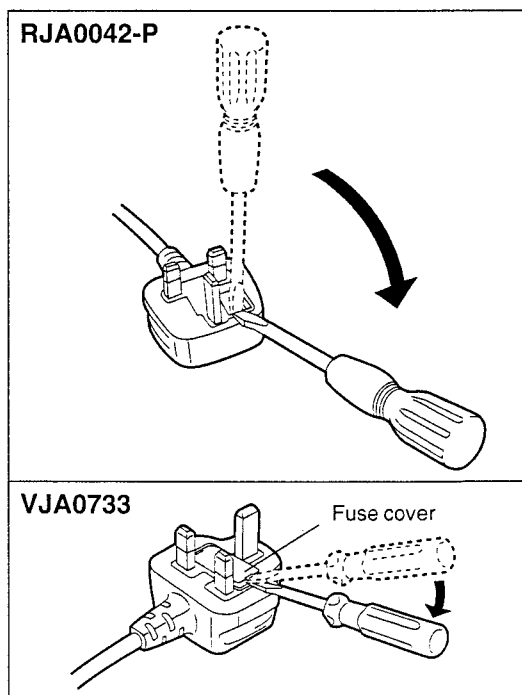
Before use

Remove the connector cover as follows.

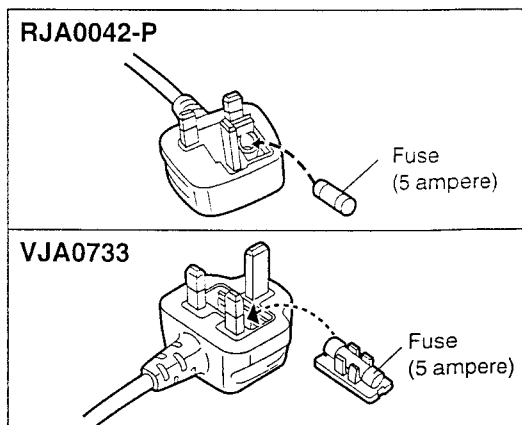


How to replace the fuse

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.

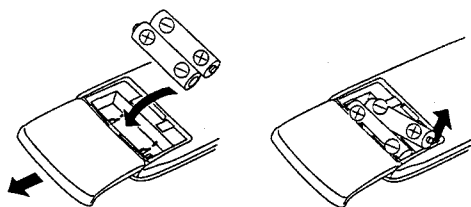


Preparing for the Remote Control

Battery installation

Insert the batteries in the correct polarities (⊕, ⊖).

To remove the batteries, pull out the ⊕ side.



Use of batteries

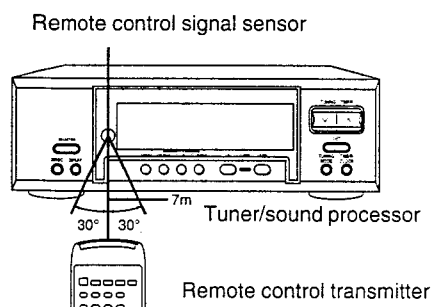
- Do not mix old and new batteries, or batteries of different types (manganese and alkaline, etc.).
- Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.
- If the remote control is not to be used for a long period of time, remove the batteries and store them in a cool, dark place.
- Do not attempt to recharge alkaline or manganese batteries.

Battery life

The battery life is about one year.

The batteries should be replaced if commands from the remote control transmitter do not operate the unit even when the transmitter is held close to the front panel.

Correct method of use



Operation notes

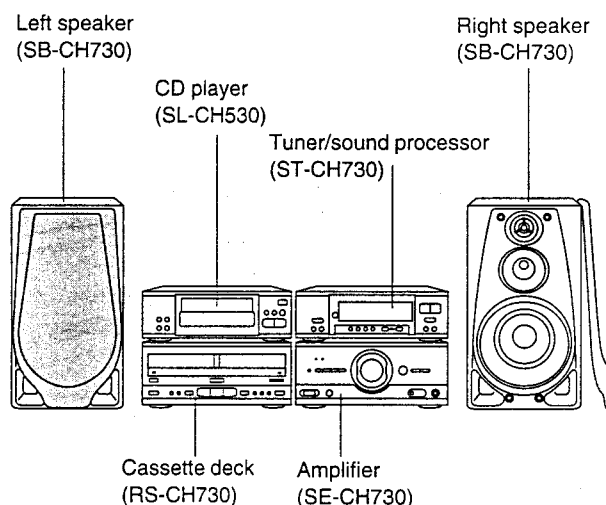
- Aim the remote control's transmission window toward the unit's sensor. Avoid any obstacles.
- The maximum distance is within 7 meters directly facing toward the remote control signal sensor.
- Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect its performance.
- The operation may not be correct if direct sunlight or other strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.
- If the system is installed in a rack with glass doors, the glass doors' thickness or color might make it necessary to use the remote control a shorter distance from the system.
- Never place heavy items.
- Do not disassemble or reconstruct.
- Do not spill water or other liquids.

Installation

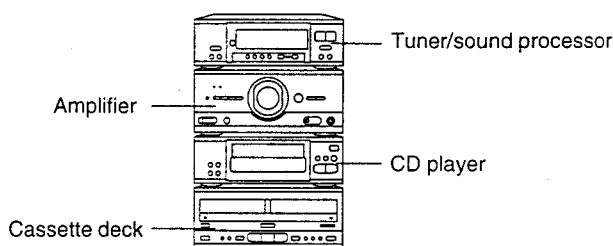
Stacking the components

- Install the various components as shown in the illustration.
- To produce a better stereo sound, install both speakers away from the system.

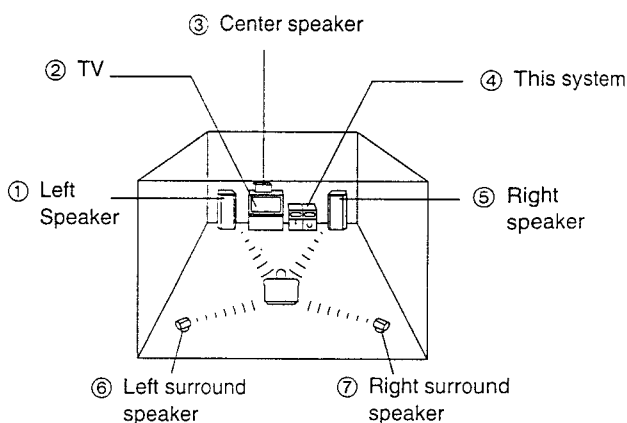
Horizontal stacking



Vertical stacking

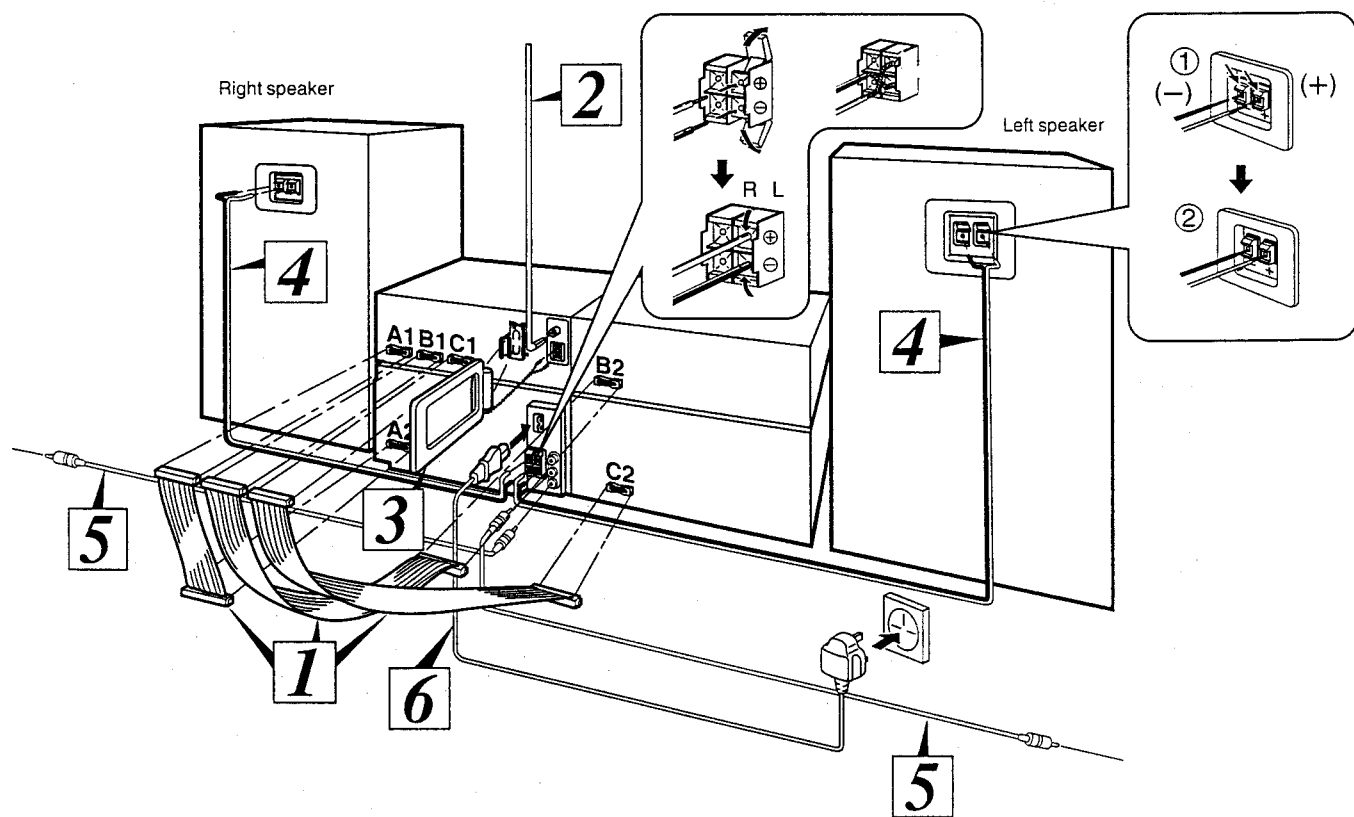


System layout example



- ② and ③ are not included in this system.

Connections



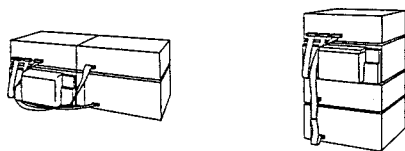
Connect the AC mains lead after you have connected all other cables.

1 Connect the flat cables.

Hold the connector with the recessed part up and press in at the center until you hear a click.

1. Connect the shorter flat cable to the terminal of the A1 and A2.
2. Connect the longer flat cable to the terminal of the B1 and B2.
3. Connect the longest flat cable to the terminal of the C1 and C2.

To disconnect the flat cable, hold the connector, and pull it out.



After connection, fold and press the cable as flat to the back of the unit as possible. (To minimize noise pickup while listening to an MW/LW broadcast)

Do not try connecting or disconnecting the flat cables while the power is switched to ON.

2 Connect the FM indoor antenna.

The tip of the internal antenna wire should not come into contact with any metal objects.

Note

When you cannot get a good reception of FM radio broadcast:

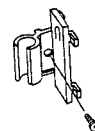
- Install the antenna on a wall at a height and in a direction which result in the best reception.
- When you cannot get a good reception with this FM indoor antenna, we recommend you install an FM outdoor antenna (not included).

3 Connect the AM (MW/LW) loop antenna.

1. Attach the antenna holder to the rear panel of the tuner/sound processor. Press the antenna holder hard enough to get it fixed firmly in the place, with a click.
2. Clamp the antenna with its cord come upward to the antenna holder.
3. Connect the antenna terminal to the rear panel of the tuner/sound processor.

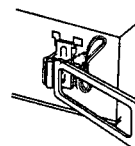
While listening to an MW/LW broadcast, position the loop antenna for the best reception.

You may attach the antenna holder to a rack or other structure. Use a screw (included) to attach as shown in the figure.



Note

To minimize noise pickup, bundle the loop antenna cord using a tape or so to keep the flat cables away from the AM loop antenna cord.



4 Connect the right (R) and left (L) speaker cables.

Notes

- Be sure to connect speaker cables before connecting the AC mains lead.
- The load impedance of any speaker used with this unit must be 6–8Ω.
- To prevent damage to circuitry, never short-circuit positive (+) and negative (–) speaker wires.
- Be sure to connect only positive (red) wires to positive (+) terminals and negative (black) wires to negative (–) terminals.

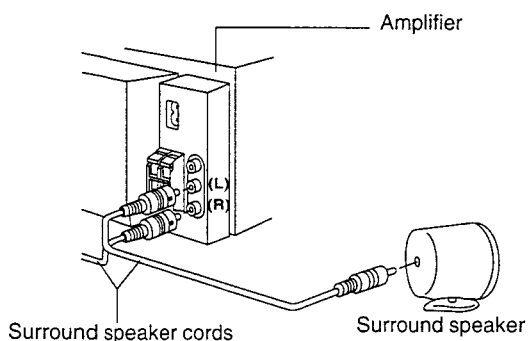
Caution

Use this speaker only with the recommended system.

Failure to do so may lead to damage to the amplifier and/or the speaker, and may result in the risk of fire.

Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.

5 Connect the surround speaker cords.



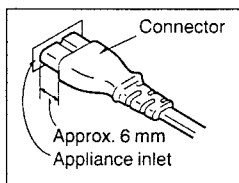
6 BE SURE TO READ THE CAUTION FOR AC MAINS LEAD ON PAGE 4 BEFORE PROCEEDING TO STEP 6.

Connect the AC mains lead.

Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.

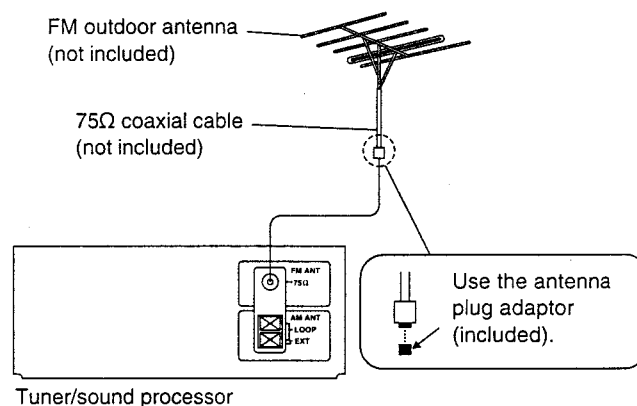
However there is no problem using the unit.



Optional antenna connections

FM outdoor antenna (not included)

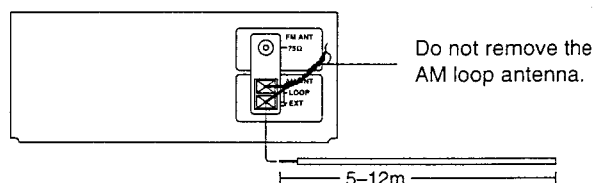
You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc. An outdoor antenna should be installed by a competent technician only.



AM (MW/LW) outdoor antenna (not included)

An outdoor antenna may be required in a mountainous region, or if this system is located inside a reinforced-concrete building, etc.

Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.



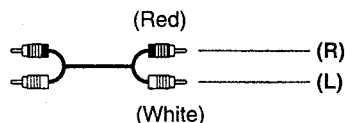
Connections

External unit connection

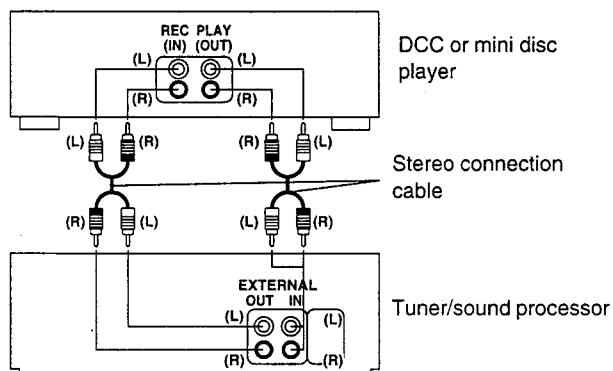
- For details, refer to the operating instructions of the units which are to be connected.
- When units other than those described below are to be connected, please consult with your audio dealer.
- These connection cables and audio products described in the illustration (except for tuner/sound processor and amplifier) are all sold separately.

Connecting the stereo connection cable (not included)

Connect the red plug to the right (R) connector.
Connect the white plug to the left (L) connector.



DCC (digital compact cassette deck) or mini disc player

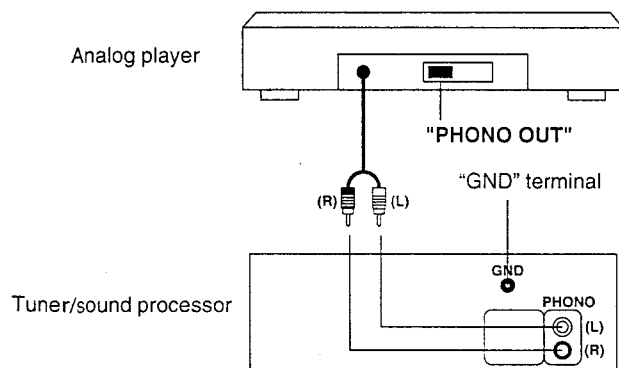


Analogue player

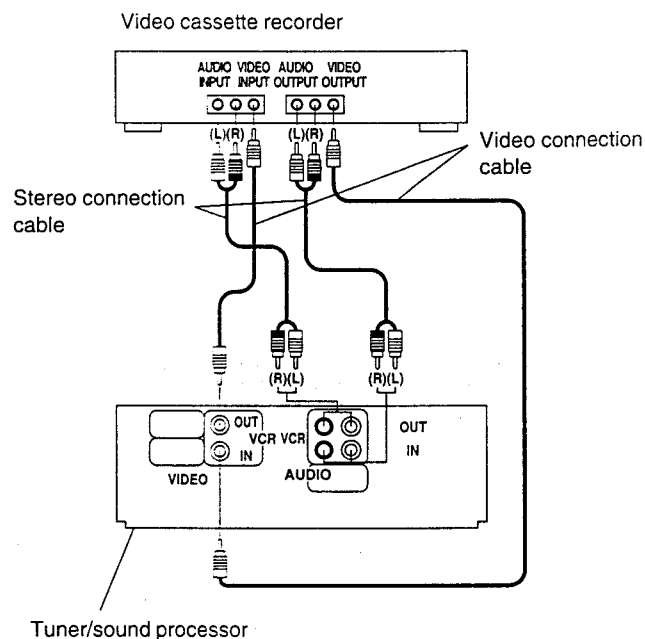
This example shows how to connect the analog player with the PHONO OUT/LINE OUT switch.

"GND" terminal is for a ground wire use.

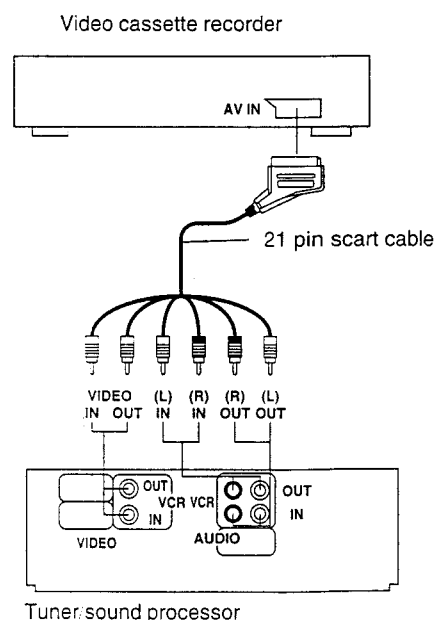
Set to the PHONO OUT position at the back of the analog player.



Video cassette recorder

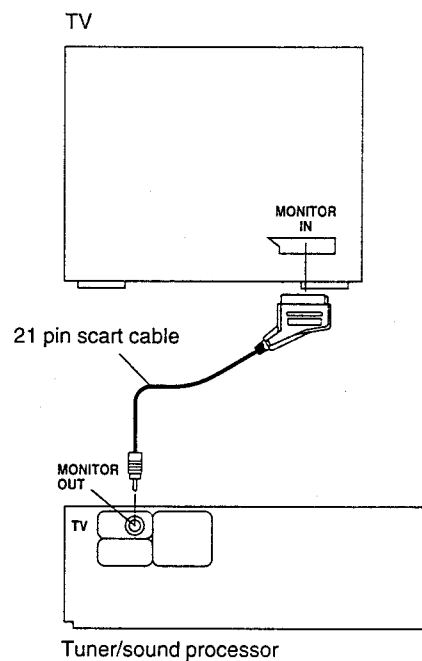
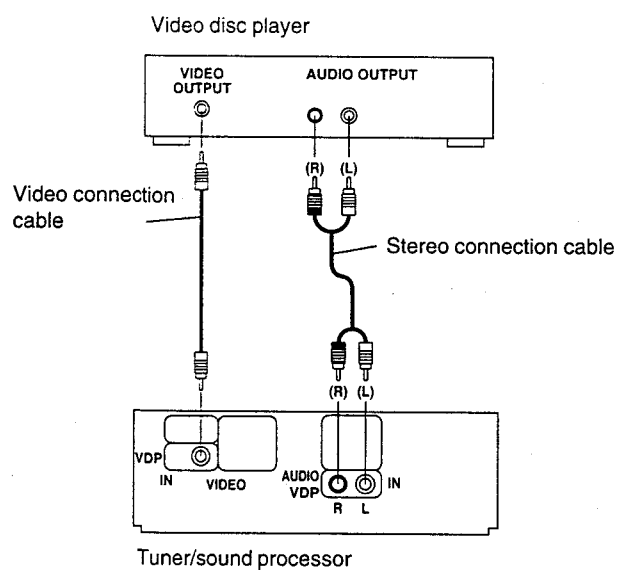


- Using 21 pin scart cable

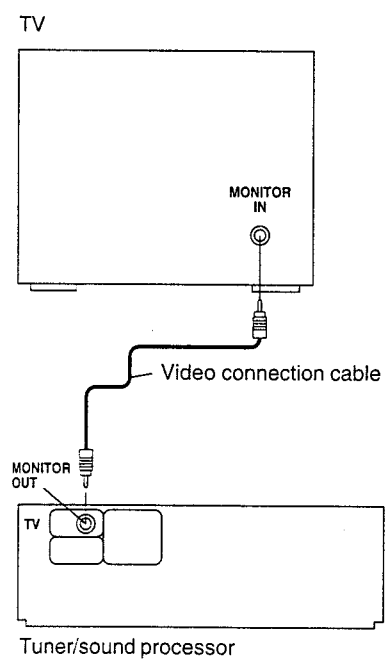


Video disc player

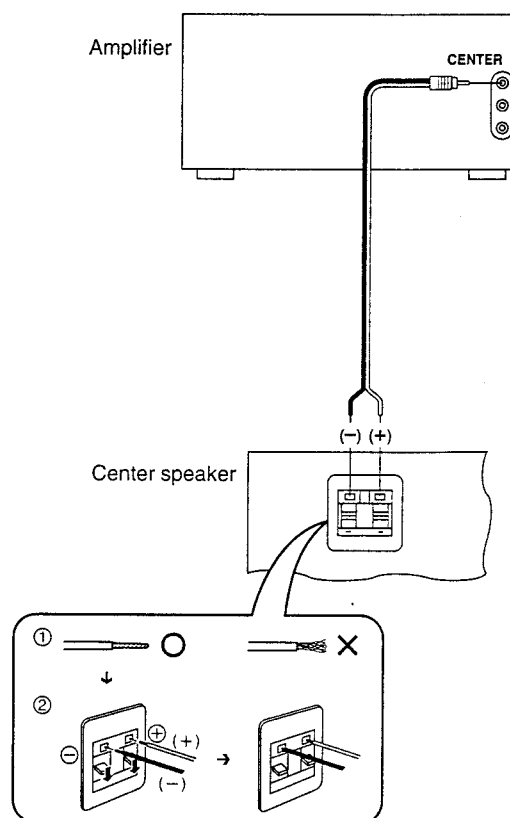
• Using 21 pin scart cable



Television set

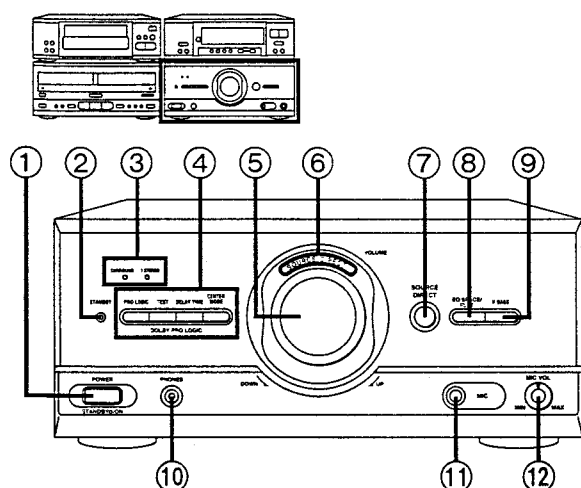


Center speaker



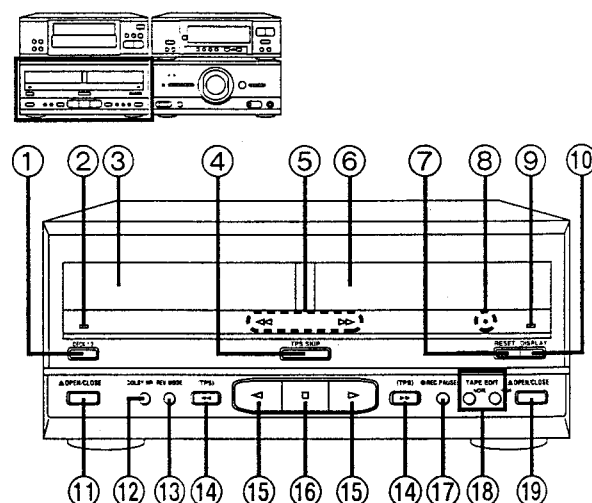
Location of Controls

Amplifier section



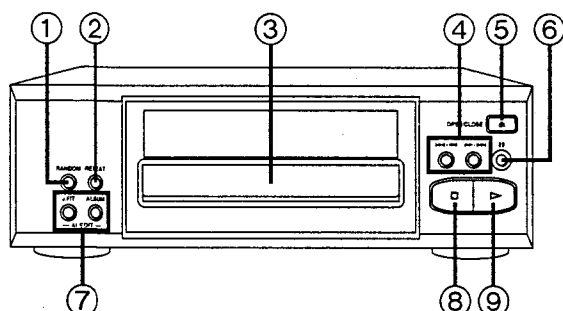
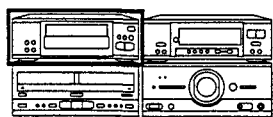
No.	Name	Ref. page
①	Power “STANDBY /ON” switch (POWER, STANDBY /ON)	12
	Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	
②	Standby indicator (STANDBY)	
	When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.	
③	Dolby Pro-Logic Surround indicators (SURROUND, 3 STEREO)	32
④	Dolby Pro-Logic Surround buttons (PRO LOGIC, TEST, DELAY TIME, CENTER MODE)	32
⑤	Volume control (VOLUME)	15
⑥	Source direct indicator (SOURCE DIRECT)	31
⑦	Source direct button (SOURCE DIRECT)	31
⑧	EQ SPACE/flat button (EQ SPACE/FLAT)	31
⑨	V. bass button (V. BASS)	31
⑩	Headphones jack (PHONES)	40
⑪	Microphone jack (MIC)	39
⑫	Microphone volume control (MIC VOL)	39

Cassette deck section



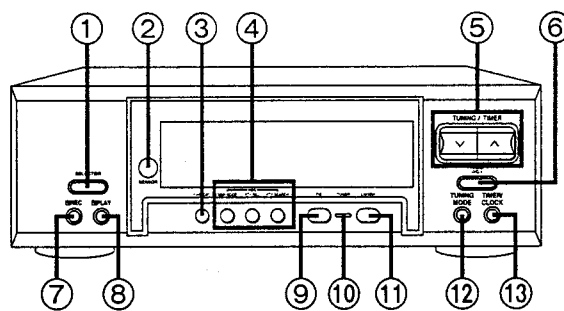
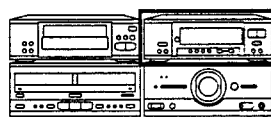
No.	Name	Ref. page
①	Deck 1/deck 2 select button (DECK 1/2)	22
②	Deck 1 indicator	22
③	Deck 1 cassette holder	22
④	TPS skip button (TPS SKIP)	23
⑤	Fast forward/rewind indicators (HIGH SPEED FF/REW)	23
⑥	Deck 2 cassette holder	25
⑦	Counter reset button (RESET)	22
⑧	Record pause indicator (REC PAUSE)	25
⑨	Deck 2 indicator	22
⑩	Counter display button (DISPLAY)	22
⑪	Deck 1 cassette holder open/close button (OPEN/CLOSE)	22
⑫	Dolby noise reduction button (DOLBY NR)	22
⑬	Reverse mode select button (REV MODE)	22
⑭	Fast forward/rewind/tape program sensor buttons [(TPS) , (TPS)]	23
⑮	Playback buttons and indicators (, ,)	22
⑯	Stop button ()	22
⑰	Record pause button (REC PAUSE)	25
⑱	Tape edit buttons (TAPE EDIT, NOR, HIGH)	30
⑲	Deck 2 cassette holder open/close button (OPEN/CLOSE)	25

CD player section



No.	Name	Ref. page
①	Random play button (RANDOM)	20
②	Repeat button (REPEAT)	19
③	Disc tray	18
④	Skip/search buttons (I◀◀/◀◀, ▶▶/▶▶I, -SKIP/-SEARCH)	19
⑤	Disc tray open/close button (OPEN/CLOSE, ▲)	18
⑥	Pause button (II)	18
⑦	CD edit buttons (AI EDIT, J. FIT, ALBUM)	28
⑧	Stop button (□)	18
⑨	Play button and indicator (▷)	18

Tuner/sound processor section

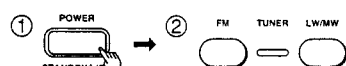


No.	Name	Ref. page
①	Source input select button (SELECTOR)	40
②	Remote control signal sensor (SENSOR)	5
③	Karaoke mode select button (KARAOKE)	39
④	RDS buttons (DISP MODE, PTY SEL, PTY SEARCH)	16
⑤	Tuning/timer select buttons (TUNING/TIMER, v, ^)	12, 13, 34
⑥	Set button (SET)	12, 13, 34
⑦	Record timer button (□ REC)	36
⑧	Play timer button (□ PLAY)	34
⑨	FM button (FM)	13, 15
⑩	Tuner indicator (TUNER)	13
⑪	LW/MW select button (LW/MW)	13, 15
⑫	Tuning mode select button (TUNING MODE)	13, 15
⑬	Timer/clock button (TIMER/CLOCK)	12, 34

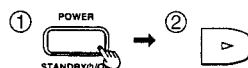
About the illumination guide

Orange indicators on the buttons guide you to the easiest steps toward listening pleasure.

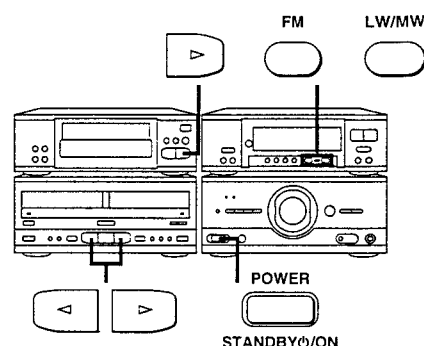
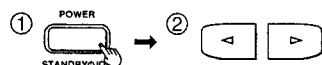
•To listen to a radio broadcast:



•To listen to a compact disc:

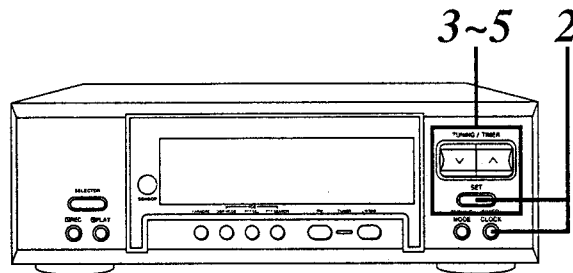
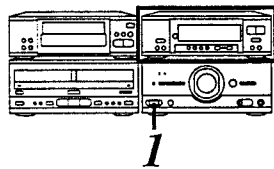


•To listen to a tape:



Setting the Time

This is a 24-hours display clock.



These instructions explain how to set the timer for 16:25 (4:25 p.m.) on Wednesday.

- 1** **POWER** Switch on the power.

STANDBY/ON
- 2** ① **TIMER/CLOCK** ① Press **TIMER/CLOCK** to show "CLOCK".

↓

② **SET**

Within 8 seconds:
② Press **SET**.

CLOCK
- 3** ① **TUNING / TIMER** ① Press **TUNING/TIMER** ∨ or ∧ to select the day.

↓

② **SET**

② Press **SET**.

SUN
- 4** ① **TUNING / TIMER** ① Press **TUNING/TIMER** ∨ or ∧ to select the hour.

↓

② **SET**

② Press **SET**.

16:00

- 5** ① **TUNING / TIMER** ① Press **TUNING/TIMER** ∨ or ∧ to select the minutes.

↓

② **SET**

② Press **SET** to finish setting the time.

The display will return to the previous display after about 3 seconds.

16:25

When "SUN 0:00" flashes:

It flashes when you connect the AC mains lead for the first time or if there has been a power failure.
If this happens, reset the time.

If the minutes setting has gone wrong:

1. Press **TIMER/CLOCK**.
2. Press **SET** 3 times.
3. Press **TUNING/TIMER** ∨ or ∧ to set the minutes, and then press **SET**.

To display the clock again:

Press **TIMER/CLOCK**.
The clock display will appear for about 8 seconds.

Memory Presetting

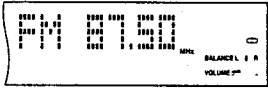
This feature allows you to set broadcast frequencies into the memory.

Automatic memory presetting

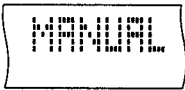
The frequencies are automatically preset (in sequence from lower to higher frequencies) into the memory: "channels" 1 to 39 are available for the presetting of FM stations, "channels" 21 to 39 are available for MW stations and "channels" 31 to 39 are available for LW stations.

Switch on the power.

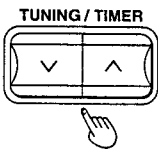
- 1** **FM** **Press FM.**



- 2** **TUNING MODE** **Press TUNING MODE to select "MANUAL".**

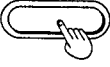
Each time you press this button, "MANUAL" and "PRESET" will appear alternately.

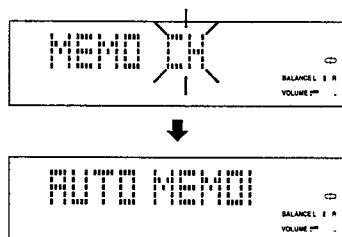


- 3** **TUNING / TIMER** **Press and hold TUNING/TIMER v or ^ until the display shows the frequency from which you want to begin automatic memory presetting.**

Press TUNING/TIMER v or ^ momentarily to stop changing frequencies when the displayed frequency approaches the lowest frequency. Tap TUNING/TIMER v or ^ a few times until the lowest frequency is reached.


- 4** **SET** **Press and hold SET and the automatic memory presetting will begin.**

Keep SET depressed until "AUTO MEMORY" will be displayed, then release the button.





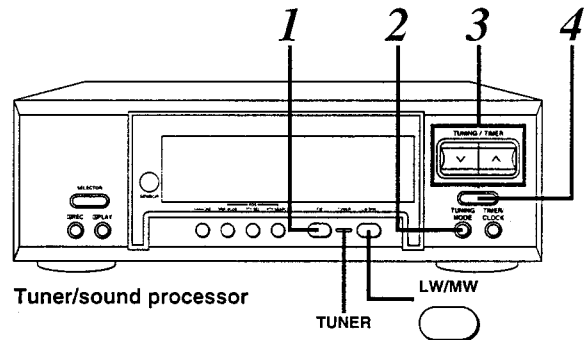
After completing the automatic memory presetting, the display shows "SET OK" and the last preset channel and frequency.

To confirm the preset stations:

1. Press TUNING MODE to select "PRESET".
2. Press TUNING/TIMER v or ^.

When "ERROR" appears:

Automatic memory presetting is unsuccessful. In such case, carry out presetting manually. (See page 14.)



To preset MW, LW broadcast frequencies into the memory:

[When MW allocation setting is different, adjust the allocation. (See below.)]

- Press LW/MW to select MW in step 1, then follow steps 2 to 4.
- Press LW/MW to select LW in step 1, then follow steps 2 to 4.

Note

When you preset a broadcast station to a channel that has already been preset, the previous presetting will be erased. So if, for example, FM frequencies are preset from channel 1 to 39 and then MW frequencies are preset, the first MW frequency will be preset to channel 21 (thus erasing the FM presetting to channel 21), the seconds MW frequency will be preset to 22 (erasing FM 22), and so on.

MW allocation settings:

(Only on the main unit)

This unit comes equipped with an electronic digital tuner that divides the broadcast band into many small steps. These steps match the assignable broadcast frequencies and intervals in between. Each country allocates (assigns) broadcast bands according to their particular needs.

By adjusting the allocation, you can change the setting from 9 kHz steps to 10 kHz steps.

1. Press LW/MW to select MW.
 2. Press and hold LW/MW for approximately 3 seconds.
- To return to the original frequency indication, repeat steps 1 and 2.

Note

After changing the "allocation" setting, the frequencies you previously preset in the memory will be cleared.

About the channel display in the "PRESET" tuning mode:

While receiving the preset channel, the selected channel (when selecting the preset channel number over 13, ">>") lights up.

While not receiving the preset channel, the preset channel display (1-12, ">>") lights off.

About the TUNER indicator:

While listening to radio broadcasts: Lights up green.

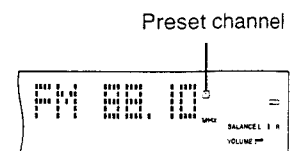
While other source is selected: Lights up orange.

Preset memory contents maintenance:

The contents of the memory will continue to be stored for approximately 2 weeks, even if the AC mains lead is disconnected.

Note

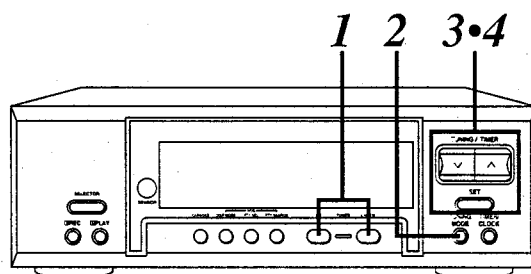
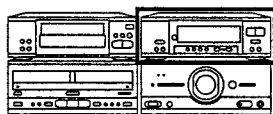
Correct presetting may not be possible in cases where the broadcast waves are too strong or too weak. In such cases, carry out presetting manually. (See page 14.)



Memory Presetting

Manual memory presetting

This feature allows you to preset manually broadcast stations into any desired channel.



This example in the figure shows how to memorize FM 88.10 MHz into preset channel 1.

1 **FM** **LW/MW** **Press FM or LW/MW.**
Each time you press LW/MW, "MW" and "LW" will appear alternately.

2 **TUNING MODE** **Press TUNING MODE to select "MANUAL".**
Each time you press the button, "MANUAL" and "PRESET" will appear alternately.

3 **TUNING / TIMER** **① Press TUNING/TIMER ∇ or ∆ to tune in the desired broadcast.**
"QUARTZ LOCK"
STEREO
"STEREO" lights when an FM stereo broadcast is being received. "QUARTZ LOCK" lights when you precisely tune in a broadcast station.
② Press SET momentarily.
"MEMO" will light.

4 **TUNING / TIMER** **① Press TUNING/TIMER ∇ or ∆ to select the desired preset channel.**
② Press SET momentarily.
"MEMO" will go out.

Automatic scanning:

Press and hold TUNING/TIMER ∇ or ∆ until the displayed frequency begins to change.

- The changing of the displayed frequency will automatically stop if a broadcast station frequency is located during the tuning process.
- When there is excessive interference, the automatic scanning may not function.

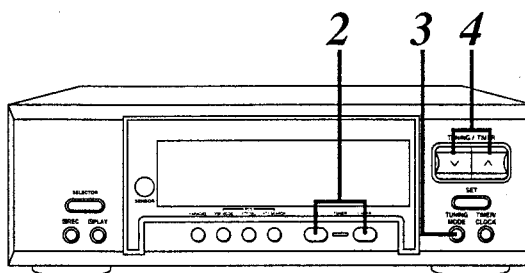
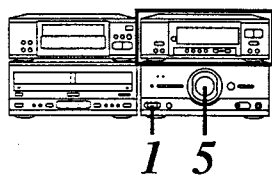
To cancel the automatic scanning, press TUNING/TIMER ∇ or ∆ once again.

About the frequency step:

The frequency display will change as follows:

- FM: 0.05 MHz step
- MW: 9 kHz or 10 kHz step
- LW: 9 kHz step

Listening to Radio Broadcasts



Manual tuner operation

- 1** **POWER** Switch on the power.
- 2** **FM LW/MW** Press FM or LW/MW.
 Each time you press LW/MW, "MW" and "LW" will be displayed alternately.
- 3** **TUNING MODE** Press TUNING MODE to select "MANUAL".
 Each time you press this button, "MANUAL" and "PRESET" will be displayed alternately.
- 4** **TUNING / TIMER** Press TUNING/TIMER ∇ or $\wedge$ to tune in the desired broadcast.
 "STEREO" lights when an FM stereo broadcast is being received. "QUARTZ LOCK" lights when you precisely tune in a broadcast station.
- 5** **VOLUME** Adjust the volume as you like.

Memory tuner operation

Switch on the power and be sure you've completed the steps of "Memory presetting" on page 13 or 14.

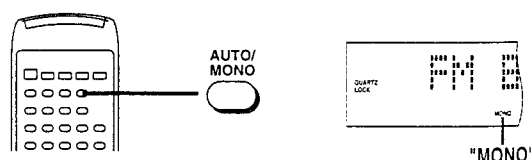
- 1** **TUNING MODE** Press TUNING MODE to select "PRESET".
 Each time you press this button, "MANUAL" and "PRESET" will be displayed alternately.
- 2** **TUNING / TIMER** Press TUNING/TIMER ∇ or $\wedge$ to select the desired preset channel.

Monaural reception with the FM stereo mode

(Available only from the remote control)

If noise is excessive in the FM stereo mode:

Press AUTO/MONO on the remote control to select "MONO". The sound will then be heard in monaural. If the broadcast signal is weak, or if there is a large amount of interference, you will get a clearer sound using MONO function.



To preset FM stations in monaural position:

1. Select the desired frequency.
2. Press AUTO/MONO on the remote control to select "MONO".
3. Follow the procedure 2, 3-② and 4 on page 14.

Enjoying RDS Broadcast

For extra tuning convenience, the SC-CH730 let you take advantage of the Radio Data System (RDS) in areas where RDS broadcast services are received. This advanced system simplifies operation and provides useful information, utilizing a 57 kHz subcarrier above the audible range, in addition to the main FM signal.

What is RDS (Radio Data System)?

RDS is a multiplex broadcasting system which adds a variety of message signals to the audio signals of FM broadcasts.

This system can utilize the following signals among the various RDS signals.

RDS messages used by this system:

- PS (Program service name): Name of the broadcast station
- PTY (Program type): Identification signal for program types such as news and sport

Note

"PTY" may not be available in some areas. (Future function)

Functions of this system which use RDS

To display the name of a broadcast station (PS display):

When this system receives a PS signal in an RDS broadcast, the name of the broadcast station is shown on the display. (For details, see the right of this page.)

To search for a program of a particular type, such as news or sport (PTY search):

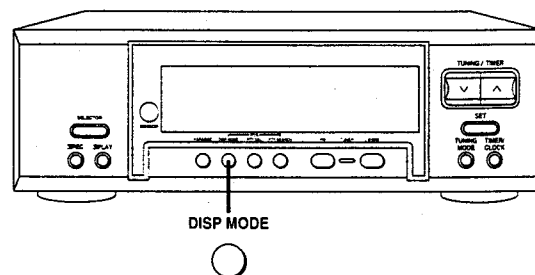
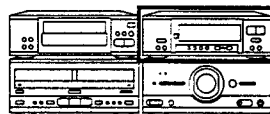
When you wish to listen to a particular type of program, a program of that type can be searched.

Furthermore, while the PTY signal is being received, the name of the type of program currently being broadcast can be shown on the display. (For details, see page 17.)

Note

Even if an FM broadcast station is transmitting RDS signals, the functions of this system may not be able to utilize these signals if the signal quality is too poor.

To display the name of a broadcast station



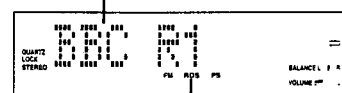
DISP MODE



(When the FM station is received) Press DISP MODE.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the name of the broadcast station and "PS" indicator will be shown on the display of this system.

Example of PS display



"RDS" indicator

Each time you press the button, the display will change as follows.

Frequency display → PS display

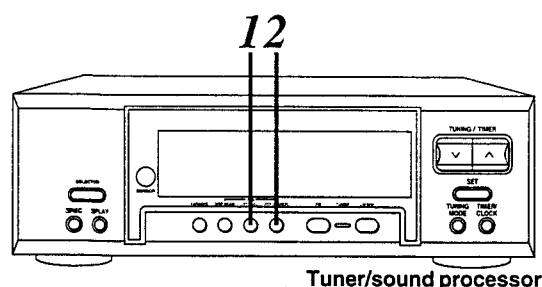
↓
PTY display

(For PTY displays, see page 17.)

Notes

- If the FM broadcast being received does not provide the RDS service, "NO RDS" will be displayed when PS display mode or PTY display mode is selected.
- If a PTY signal is not being received, "NO PTY" will be displayed when the PTY display mode is selected.

To listen to a program of a particular type, such as news or sport (PTY search)



- The PTY search is carried out with respect to FM broadcast stations that have been preset into the memory. Make sure that "Memory Presetting" on pages 13 or 14 have been completed before carrying out a PTY search.
- Carry out this operation while tuning in an FM broadcast.

Note

"PTY" may not be available in some areas. (Future function)

1

PTY SEL



Press PTY SEL to select the desired program type.

Each time you press this button, the PTY display will change in sequence. (Refer to "About the PTY display" on the right of this page.)



Note

Approximately 8 seconds after the PTY display starts flashing, the display will return to the previous one.

To select a different PTY, or when proceeding to the following step 2, be sure to perform all operations while the PTY display is flashing.

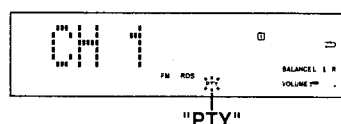
2

PTY SEARCH



(While PTY display is flashing) Press PTY SEARCH.

The PTY search will begin. ("PTY" will flash on the display.)



When the desired type of program is located:

The type of program is displayed for approximately 5 seconds and the program will automatically change to the broadcast station that has just been located.

To search for a different broadcast station, press the PTY SEARCH once more while the type of program is displayed.

If the desired type of program is not found:

"NO PTY" will be displayed for approximately 5 seconds, and the program will return to the previous broadcast station.

Most-recent memory:

The most-recent memory system "remembers" the program type last selected in step 1 above when the system was switched OFF. For example, if "SPORT" is selected and the system is turned OFF, when the PTY SEL is pressed again at step 1, "SPORT" will be displayed.

About the PTY display

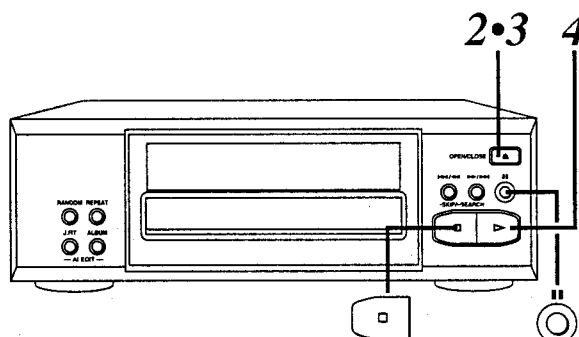
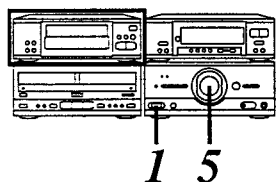
There are a total of 15 PTY displays on this system. The display changes in order each time the PTY SEL is pressed. The table below shows the order in which the display changes, and also gives an explanation of each display.

Display	Explanation
NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical program expanding or enlarging upon the news, generally in different presentation styles or concept, including documentary debate, or analysis.
INFO	Program whose purpose is to impart advice in the widest sense, including meteorological reports and forecasts, consumer affairs, medical help, etc.
SPORT	Program concerned with any aspect of sport.
EDUCATE	Program intended primarily to educate.
DRAMA	All radio plays and serials.
CULTURE	Programs concerned with any aspect of national or regional culture, including religious affairs, philosophy, social science, language, theatre, etc.
SCIENCE	Programs about the natural sciences and technology.
VARIED	Used for mainly speech-based programs, usually of a light-entertainment nature not covered by above categories. Examples are: quizzes, panel games, personality interviews, comedy and satire.
POP M	Commercial music which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
M.O.R. M	(Middle of the Road Music). Common term to describe music considered to be "easy-listening" as opposed to Pop, Rock or Classical. Music in this category is often, but not always, vocal, and usually of short duration (<5 min.).
LIGHT M	Classical Musical for general, rather than specialist, appreciation. Examples of music in this category are instrumental music and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the above categories. Particularly used for specialist music, of which Jazz, Rhythm & Blues, Folk, Country, and Reggae are examples.

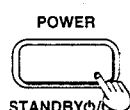
After "OTHER M" is displayed, the display returns to "NEWS".

Listening to Compact Discs

Sequential play



1



Switch on the power.

2



Press OPEN/CLOSE to open the tray.
Insert the CD with label facing upward.

Label must face upward.



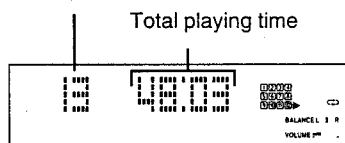
Do not put your finger through the hole in the middle of the tray. It could get caught when the tray closes.

3



Press OPEN/CLOSE to close the tray.

Total number of tracks

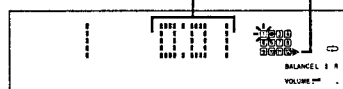


4



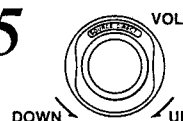
Press .

Elapsed play time



Play will start from the first track on the CD.
Play will stop automatically when the last track on the CD finishes playing.
When there are 13 or more tracks on the CD, " 13" will appear.

5



Adjust the volume level as you like.

To stop the disc play:

Press .

To temporarily stop the disc play:

Press button. indicator flashes up green.

To play again, press .

For your reference:

If you press instead of OPEN/CLOSE after inserting a CD, the tray will close and play will start directly from the track 1.

When "NO DISC" display appears:

It indicates that a CD has not been installed.

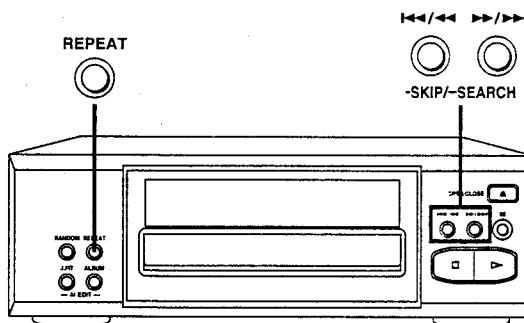
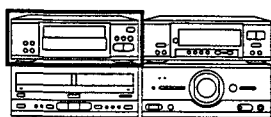
About indicator:

While halted: Lights up orange.

While playing: Lights up green.

About the total playing time:

The total playing time displayed includes the silent sections between tracks. Hence, there will be a difference between the total playing time and the liner notes.



Repeat function

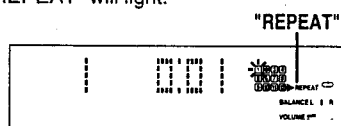
This function repeats the play of all tracks.

REPEAT



Press REPEAT before or during play.

"REPEAT" will light.



To cancel repeat play:

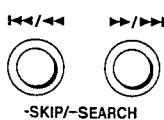
Press REPEAT once again.

"REPEAT" will go out.

For your reference:

In program play mode (See page 21), the CD player will repeat only the programmed tracks. You can enjoy the same track over and over by programming only one track.

Skip function



-SKIP/-SEARCH

Press either $\lll/\lll$ or $\ggg/\ggg$.

$\ggg/\ggg$: To skip forward

You can skip as many tracks as the number of times you press the button.

$\lll/\lll$: To skip backward

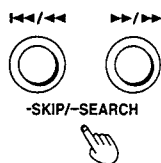
You can skip to the beginning of the track being played. If you press the button again quickly, you can skip to the beginning of the previous track.

For your reference:

- In random play mode (See page 20), you cannot skip to the previous track.
- In program play mode (See page 21) you can skip only the programmed tracks.

Search function

(Available only from the main unit)



-SKIP/-SEARCH

While in play mode, press and hold either $\lll/\lll$ or $\ggg/\ggg$.

Release the button when you have reached the desired point.

$\ggg/\ggg$: To search forward

$\lll/\lll$: To search backward

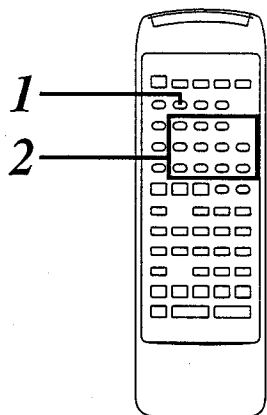
For your reference:

During program play and random play, search will take place within the track being played. (See pages 20 and 21).

Direct access play

(Available only from the remote control)

Direct access allows you to start sequential play from a specific track to the last track on the CD.



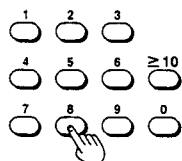
This example in the figure shows how to start the play from the 8th track.

1



Press CD.

2



Press the numeric button to select the desired track number.

Play will start with the track you select.



To select a two-digit track:

Press ≥ 10 .

For example:

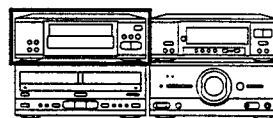
Track no. 13: $\geq 10 \rightarrow 1 \rightarrow 3$

Track no. 20: $\geq 10 \rightarrow 2 \rightarrow 0$

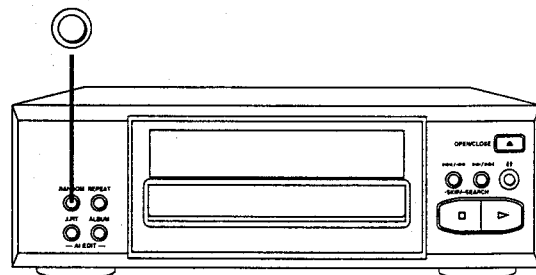
Track no. 35: $\geq 10 \rightarrow 3 \rightarrow 5$

Random play

This function automatically selects a sequence of tracks to be played in random order.



RANDOM



RANDOM

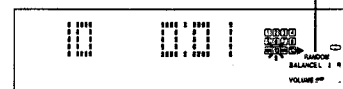


Press RANDOM.

"RANDOM" will light, and then random play will start.

Play will stop automatically when all tracks on the CD finish playing randomly.

"RANDOM"



To cancel random play:

Press RANDOM once again.

"RANDOM" will go out. The CD player resumes the sequential play mode.

For your reference:

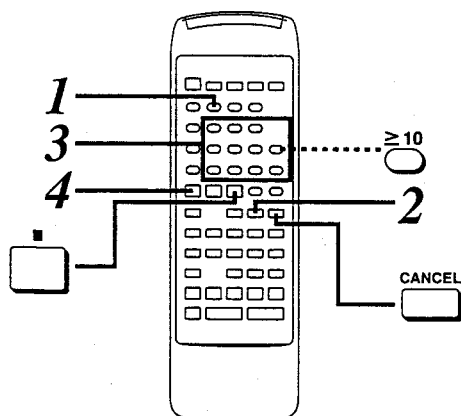
In the program play mode (See page 21), the programmed tracks will be played randomly.

When you press REPEAT in the above condition, the CD player repeats the programmed tracks randomly.

Program play

(Available only from the remote control)

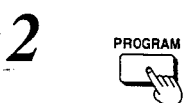
This function allows you to program up to 24 tracks on a CD in any order you choose.



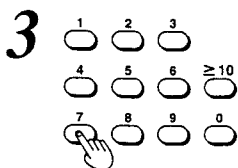
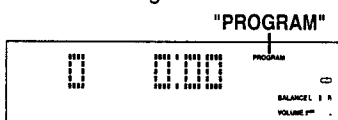
This example in the figure shows how to program tracks 3, 5 and 7 in sequence.



Press CD.



Press PROGRAM.
"PROGRAM" will light.



Press the numeric button to select the track you want to play in the desired sequence.

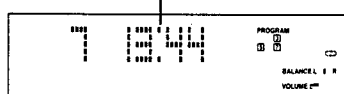
Programmed track number



Programmed order



Total playing time



4



Press ►.

Play will start in the programmed sequence.

To cancel program play:

Press PROGRAM.

The CD player resumes sequential play mode.

To select a two-digit track:

Press ≥10.

For example:

Track no. 13: ≥10→1→3

Track no. 20: ≥10→2→0

Track no. 35: ≥10→3→5

To add an entry:

Press the numeric button corresponding to the track to be added.

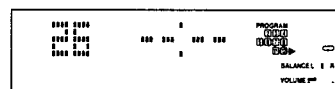
When "FULL" appears:

The number of programmed tracks is limited to 24. No further tracks can be programmed.



When "--:--" appears:

The total playing time of the programmed tracks has exceeded 99 minutes 59 seconds, or you programmed track number 25 or more. However, programming and play are still possible.



To clear a programmed track one by one:

(Using the numeric button)

1. Press CANCEL.

"CANCEL" lights.

2. Press the numeric button of the track you want to cancel.

3. Press CANCEL.

"CANCEL" goes out.

(Using ◀◀/▶▶ or ▶▶/▶▶ on the CD player)

1. Press CANCEL on the remote control.

"CANCEL" lights.

2. Press ◀◀/▶▶ or ▶▶/▶▶ repeatedly until the display shows the track number you want to cancel.

3. (Within 10 seconds)

Press CANCEL.

4. Repeat steps 2 and 3 to finish cancelling track.

5. Press CANCEL.

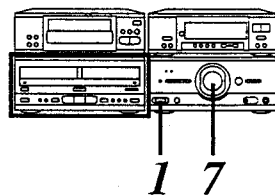
"CANCEL" goes out.

To clear all tracks:

Press ■ once in the stop mode or twice in the play mode.

Listening to Tapes

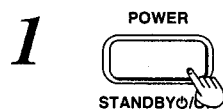
Playback



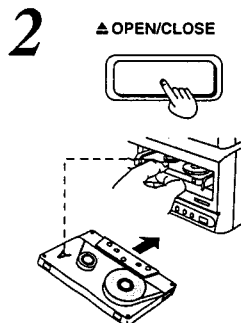
Type of tape which can be played on this unit:

NORMAL POSITION/TYPE I	☐
HIGH POSITION/TYPE II	☐
Metal/TYPE IV	☐

The unit automatically identifies the type of tape.
This page shows an example using deck 1.

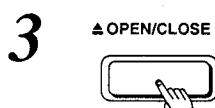


Switch on the power.

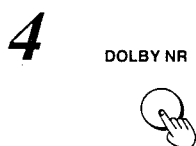


Press ▲ OPEN/CLOSE on deck 1, and then insert the tape.

Load a tape with the exposed side facing the cassette holder's insertion part. Insert the tape following the illustration. The illustration shows an example when you start playback from the beginning of the tape side A (front side) with the "▷" playback button. Insert the cassette tape until it touches the back of the compartment.

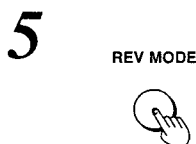
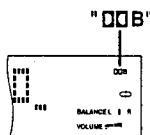


Press ▲ OPEN/CLOSE on deck 1 to close the cassette holder.



Press DOLBY NR to select ON or OFF.

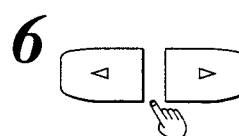
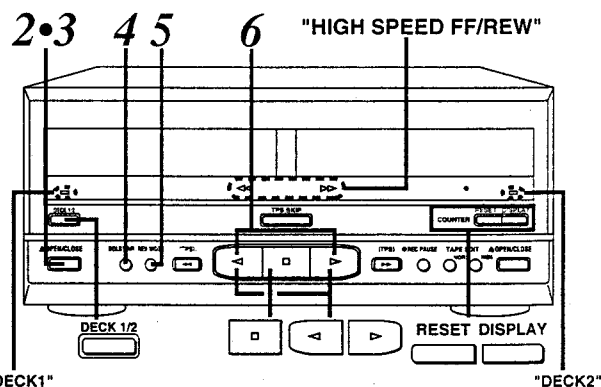
"000" appears when the Dolby NR system is on.



Press REV MODE to select the reverse mode.

Each time you press REV MODE, one of the indicators will appear.

- ⏮ : The deck plays one side only, and then stops automatically.
 - ⏪ : The deck plays both sides, and then stops automatically.
 - ⏩ : The deck plays both sides 8 times, and then stops automatically.
- When you load tapes into both decks; sequential playback will be made. (See page 23.)



Press ◀ or ▶.

- ▶: The forward side will play.
- ◀: The reverse side will play.



Adjust the volume level as you like.

To stop tape playback:

Press □.

To change the deck to be used:

Press DECK 1/2 to select the deck you want to play. Deck 1 or deck 2 indicator lights up.

About the ◀ and ▶ indicators:

While halted, fast forwarding, or rewinding:
Lights up orange.

While playing, recording or finding the beginning of a program:
Lights up green.

Note

Do not insert your finger etc. into the cassette holder.

To reset the tape counter:

It is convenient to reset the counter when you want to memorize a certain point (For example, when you want to rewind the tape to the midway of the tune, etc.).

The tape counter indicates the amount of tape travel as a numerical value based on the number of revolutions of the tape hub.

1. Press DECK 1/2 to select the deck to be used.
2. Press RESET.

•When the tuner or CD mode display shows, the tape counter display will appear for about 1 second.

For your reference:

When the tape is travelling in the reverse direction, the value displayed on the tape counter will count down.

After "000_" is reached, the display will switch to "999_" and then continue counting down.

To change to the counter display mode:

While recording from CD or radio broadcast, you can check the tape counter by switching the display mode.

While the display shows the CD or tuner mode display, Press DISPLAY.

The display changes to the tape counter mode.

To return to the previous display, press DISPLAY again (or when 5 seconds have passed, the previous display will be resumed.)

To fast forward or rewind the tape

Press (TPS) ◀◀ or (TPS) ▶▶ while the tape is in the stop mode.

If the forward side (▷) indicator lights:

(TPS) ▶▶: The tape will be fast forwarded.

(TPS) ◀◀: The tape will be rewound.

High-speed rewind/fast-forward:

The deck rewind/fast-forward the tape with high-speed when:

- The deck rewinds from around the end of the tape
- The deck fast-forwards from around the beginning of the tape

While the high-speed rewind/fast forward is activated, "HIGH SPEED FF/REV" indicator flashes.

When you press (TPS) ◀◀ or (TPS) ▶▶ while the high-speed rewind/fast-forward is activated, the deck resumes the normal-speed rewind/fast-forward.

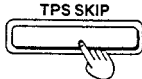
For your reference:

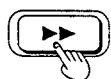
- Each decks' play direction is stored in the system's memory.
- The deck may sometimes make the high-speed rewind/fast-forward from around the midway of the tape.
- You can fast forward or rewind the tape while you are playing or recording a tape in another deck. Press DECK 1/2 to switch to the non playing deck, and then press (TPS) ◀◀ or (TPS) ▶▶. After above operation, be sure to press DECK 1/2 to select the deck in which you are playing a tape.

To find the beginning of a program

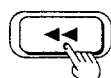
(TPS: tape program sensor)

During play, the number of programs corresponding to the number of times TPS SKIP was pressed will be skipped, and the desired program is located (up to 9 programs before or after the program now heard.)

- 

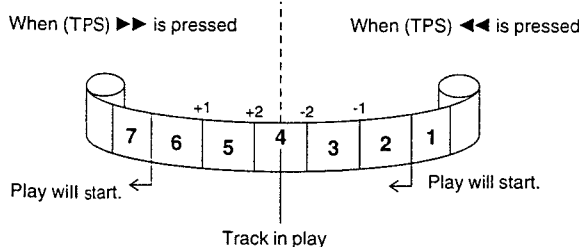
Press TPS SKIP.
Each time you press this button, the display will change as follows:
TPS 1→2→3...8→9→DECK (1 or 2)
- 

Press (TPS) ◀◀ or (TPS) ▶▶.
If the forward side (▷) is playing:
(TPS) ▶▶: Skips forward by the number of tracks corresponding to the number you select in step 1. ("+" lights.)
(TPS) ◀◀: Skips backward by the number of tracks corresponding to the number you select in step 1. ("—" lights.)



If the reverse side (◁) of the tape is playing:
The reverse operation will take place.

The illustration below shows an example when the forward side (▷) is playing after you select "TPS 3":



Notes

- To change the setting (the number of the programs to be skipped, the tape travel direction, etc.) while TPS skip is activated, press □ to stop the deck first.
- If the number of TPS skips specified is larger than the number of songs recorded on the tape, the unit may stop at the end of the tape or otherwise fail to operate correctly.

When you skip 1 track before or after the program now heard:

Press (TPS) ◀◀ or (TPS) ▶▶ once while the tape is playing.

Notes

TPS is the function that searches for the silent passage in a tape program. So, it may sometimes fail to operate correctly in the following situations:

- When there is no blank space between tape programs (for example, a tape recorded from a microphone)
- When the interval between programs is less than 4 seconds
- When there is a particular low-level passage in a program (for example, classical music)
- When the program is less than 10 seconds, or when it is less than 10 seconds from the listening point to the beginning of the next tune
- When a tape recorded with fade-ins or fade-outs

Sequential playback among 2 tapes

- Press ▲ OPEN/CLOSE on decks 1 and 2, and then insert the tapes.**
Load with the side upward that you wish to listen to first in deck 1.
 - Press ▲ OPEN/CLOSE to close each deck's cassette holder.**
 - Press DOLBY NR to select ON or OFF.**
"□□ B" lights up when the Dolby NR system is on.
 - Press REV MODE to select "◁▷" mode.**
 - Press DECK 1/2 to select deck 1.**
The deck 1 indicator will light up.
 - Press ▷.**
 - ① Forward side of tape in deck 1
 - ② Reverse side of tape in deck 1
 - ③ Forward side of tape in deck 2
 - ④ Reverse side of tape in deck 2
- After repeating above operation 8 times, the tape will automatically stop.
 - You can also start playback from a position other than the forward side in deck 1 (①). In this case, too, the deck counts 1 time after finishes playback of the reverse side of tape in deck 2 (④).

To stop tape playback:

Press □.

For your reference:

- You cannot select Dolby NR for deck 1 and 2 respectively. We recommend you use tapes of the same type (Dolby noise reduction).

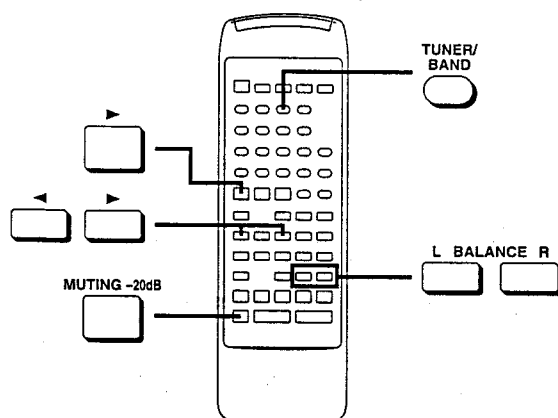
About priority of the deck:

When you load tapes in both decks, deck 1 or 2 indicator will light to show which deck you loaded last.

When you switch on the power, deck 1 indicator will light.

Convenient Functions

(Available only from the remote control)



Easy play

- From the power standby condition, you can start play directly.
- The play will start with volume increasing gradually.

■ Listening to compact discs



Press ►.

The play will start from the first track. When the tracks has been programmed (See page 21), the play will start in the programmed sequence.

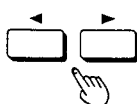
■ Listening to radio broadcasts



Press TUNER/BAND.

You can receive the station last tuned in.

■ Listening to tapes



Press ◀ or ▶.

- Playback will automatically start under the same conditions (reverse mode) as last set.
- When tapes have been loaded in both decks, deck 1 has priority.

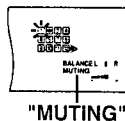
To mute the volume

This feature is convenient when you have a telephone call, etc.

Press MUTING -20 dB.

"MUTING" will light. To cancel, press MUTING -20 dB once again.

To cancel from the amplifier, reduce the volume level to the minimum position (-∞ dB) and then reset to the desired volume.



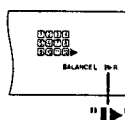
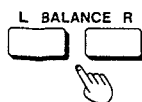
To adjust the left-right volume balance

Press L or R of BALANCE.

The display shows "◀" or "▶".

Pressing L and R of BALANCE simultaneously will restore the balance to the center position.

(The display shows when "R" button is pressed.)



For Your Recording

Concerning cassette tapes:

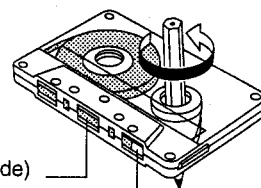
Type of tape which can be used for recording:

NORMAL POSITION/TYPE I	○
HIGH POSITION/TYPE II	○
Metal/TYPE IV	○

The unit automatically identifies the type of tape.

To take up the leader tape

The leader tape is the first few revolutions that you cannot record on.



Magnetic tape
(recording can be made)

Leader tape
(no recording can be made)

To erase a recorded sound

1. Disconnect the microphone if it was connected.
2. Press SELECTOR on the tuner/sound processor to select "TAPE".
3. Press DOLBY NR so that **NR** indicator goes out.
4. Insert the recorded tape into deck 2.
5. Press REV MODE to select reverse mode.
6. Press REC PAUSE.
7. Press ◀ or ▶.

About Dolby Noise Reduction system:

The Dolby noise-reduction system is designed to effectively reduce the annoying high-frequency "hissing" noise typical of cassette tapes. During recording, the system functions to increase the high-frequency sound level. The sound, and then, during playback, that same portion is weakened to bring it back to the previous level. This unit includes one type of Dolby noise-reduction systems, the Dolby B NR-type.

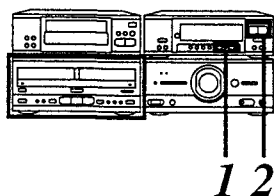
Dolby B-type noise reduction

Noise is reduced to about one-third.

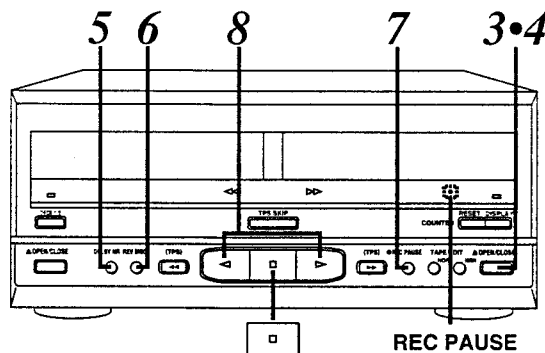
Use this system when playing back tapes recorded by the Dolby-B noise-reduction system, such as prerecorded music tapes, etc.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol **DD** are trademarks of Dolby Laboratories Licensing Corporation.

Making a Recording from Radio Broadcasts



Your attention is drawn to the fact that recording pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

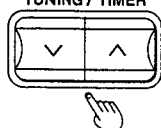


The leader tape must be wound up beforehand. (See page 24.)

1 **FM** **LW/MW** Press **FM** or **LW/MW** on the tuner/sound processor.

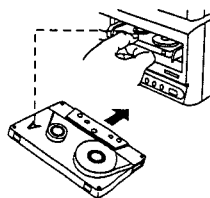


2 **TUNING / TIMER** Press **TUNING/TIMER** ∇ or $\wedge$ on the tuner/sound processor to tune in the desired station.



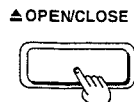
You can also select the station with manual tuner operation.

3 **OPEN/CLOSE** Press **OPEN/CLOSE** on deck 2, and then insert the tape.



Insert the tape following the illustration. The illustration shows an example when you start recording from the beginning of the tape side A (front side) with the " $\triangleright$ " playback button. Insert the cassette tape until it touches the back of the compartment.

4 **OPEN/CLOSE** Press **OPEN/CLOSE** on deck 2 to close the holder.



5 **DOLBY NR** Press **DOLBY NR** to select **ON** or **OFF**.

DOLBY NR



" $\square\square$ B" lights up when the Dolby NR system is on.

6 **REV MODE**



Press **REV MODE** to select the reverse mode.

$\rightleftarrows$ One side will record, and then the tape will stop automatically at the tape end.

$\rightarrow\leftarrow$: Both sides will record (forward side $\rightarrow$ reverse side), and then the tape will stop automatically at the tape end.

$\rightleftarrows$: Same as above. (When you press **REC PAUSE**, " $\rightleftarrows$ " will be automatically switched over to " $\rightarrow\leftarrow$ " and returns when the recording has been over.)

7 **REC PAUSE**

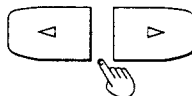


Press **REC PAUSE** to put the cassette deck into the recording standby mode.

REC PAUSE indicator will light.

" $\triangleleft$ " or " $\triangleright$ " indicator on the playback buttons flashes.

8 Press $\triangleleft$ or $\triangleright$ to start recording.



To stop recording:

Press $\square$.

To cut an unnecessary part while recording:

1. Press **REC PAUSE**.

The cassette deck will go into the recording standby state.

2. To resume recording, press $\triangleleft$ or $\triangleright$ corresponding to the direction in which recording is taking place.

For Your Recording from Compact Discs

There are 2 ways to record from compact discs, synchro-recording and one-touch editing.

Synchro-recording (See page 27.)

The system records tracks in the original sequence without calculating the tape length. You can record as many tracks as you like using this mode.

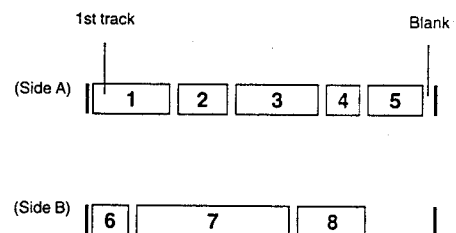
When you want to record on the remaining portion of the pre-recorded tape, use the synchro-recording.

One-touch editing (See page 28.)

The system calculates the length of the tape used, and safeguards against a break in the continuity of sound when the recording changes from one side of the tape to the other side.

■ **Editing of tracks in their original sequence (ALBUM):**

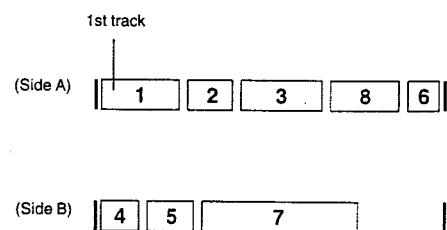
If the system determines it is possible to record one more track on side A, the cassette deck rewinds the tape side A and the first track assigned on the tape side B will be recorded on the tape side A. Up to 24 tracks can be edited.



"ALBUM"

■ **Allotting tracks to the tape without wasting tape space (J. FIT):**

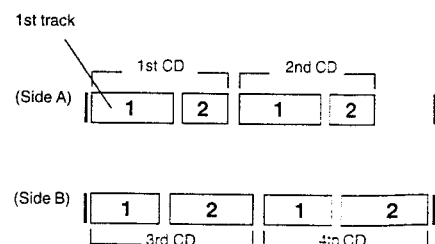
If the amount of blank space is too great, the cassette deck rewinds the tape side A and the CD player selects a track which is the most appropriate fit for the end of tape side A. Up to 24 tracks can be edited.



"J.FIT"

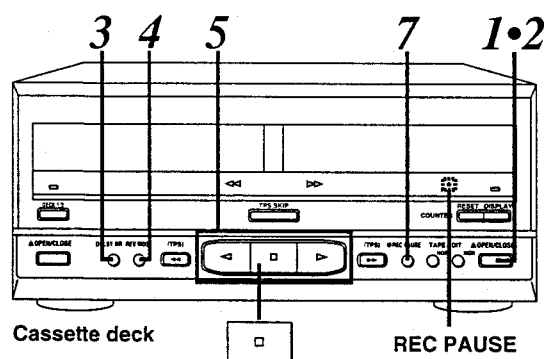
■ **Linking up several discs (LINK):**

After the edit-recording of loaded CDs have finished, you can subsequently edit-record other CD(s) on the remaining blank portion of the tape. This function is convenient when recording from 8 cm CDs successively.



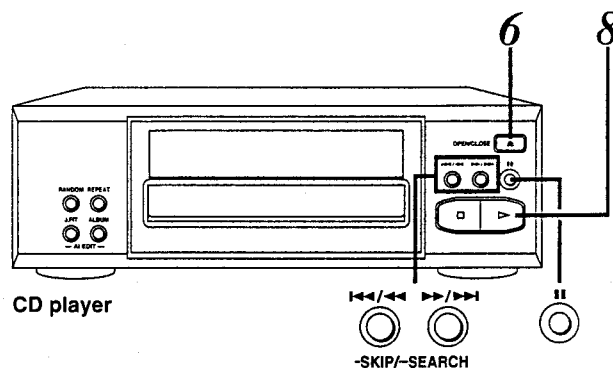
Recording from Compact Discs

Synchro recording



Cassette deck

REC PAUSE



CD player

SKIP-SEARCH

Type of tape which can be used for recording:

NORMAL POSITION/TYPE I	☐
HIGH POSITION/TYPE II	☐
Metal/TYPE IV	☐

The unit automatically identifies the type of tape.
Check that the tape's tabs (see page 44) are intact.
The leader tape must be wound up beforehand. (See page 24.)

1 **▲ OPEN/CLOSE**
Press **▲ OPEN/CLOSE** on deck 2, and then insert a tape.
The illustration shows an example when you start recording from the beginning of the tape side A (front side) with the "▷" playback button.
Insert the cassette tape until it touches the back of the compartment.

2 **▲ OPEN/CLOSE**
Press **▲ OPEN/CLOSE** on deck 2 to close the holder.

3 **DOLBY NR**
Press **DOLBY NR** to select **ON** or **OFF**.
"B" lights up when the Dolby NR system is on.

4 **REV MODE**
Press **REV MODE** to select the reverse mode.

- ▷ : One side will record, and then the tape will stop automatically at the tape end.
- ▷◁ : Both sides will record (forward side→reverse side), and then the tape will stop automatically at the tape end.
- ◁ : Same as above. (When you press **REC PAUSE**, "◁▷" will be automatically switched over to "▷◁" and returns when the recording has been over.)

5 **Set the tape travel direction.**
To change the tape travel direction, first press ◁ or ▷ on the cassette deck, then **▷**.
▷ : Recording from the forward side
◁ : Recording from the reverse side

6 **OPEN/CLOSE**
Press **▲ OPEN/CLOSE** to load a CD.
Press **▲ OPEN/CLOSE** again to close the tray.

7 **● REC PAUSE**
Press **REC PAUSE** to put the cassette deck into the recording standby mode.
REC PAUSE indicator lights.

8 **▷**
Press **▷** on the CD player.
The recording will automatically start corresponding to the tape travel direction.

To stop recording:

Press **□** on the cassette deck.
The recording will stop and the CD playing will go on.

When you press **□** on the CD player:

The cassette deck will create a non-recorded passage of about 4 seconds, and then go into the recording standby state.

After the CD play finishes:

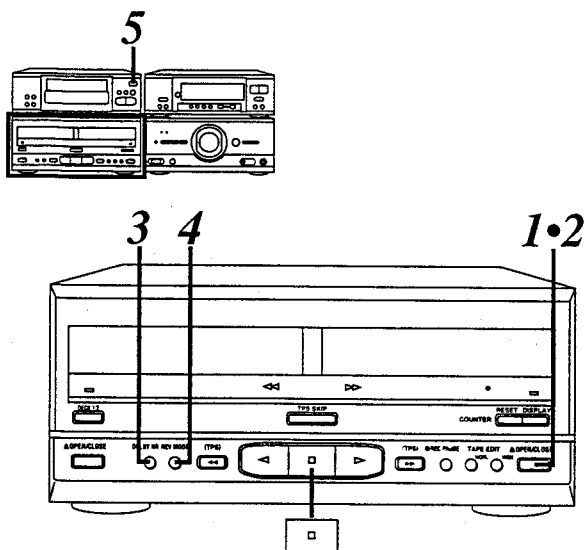
The cassette deck will create a non-recorded passage of about 4 seconds, and then go into the recording standby mode.

When you want to cut an unnecessary track while recording:

Before an unnecessary track play will start,

1. Press **II** on the CD player.
The cassette deck will create a non-recorded passage of about 4 seconds, and then go into the recording standby mode.
2. Press **I◀/◀◀** or **▶▶/▶I** to skip to the desired track.
3. Press **▷** on the CD player to resume recording.

One-touch editing preparation



Type of tape which can be used for recording:

NORMAL POSITION/TYPE I	☐
HIGH POSITION/TYPE II	☐
Metal/TYPE IV	☐

The unit automatically identifies the type of tape.
Check that the tape's tabs (see page 44) are intact.

1 Press **▲ OPEN/CLOSE** on deck 2, and then insert a tape. When the edit-record starts, the cassette deck will automatically rewind the tape back to the beginning where the recording can be made. So you don't have to rewind the tape in advance.

2 Press **▲ OPEN/CLOSE** on deck 2 to close the holder.

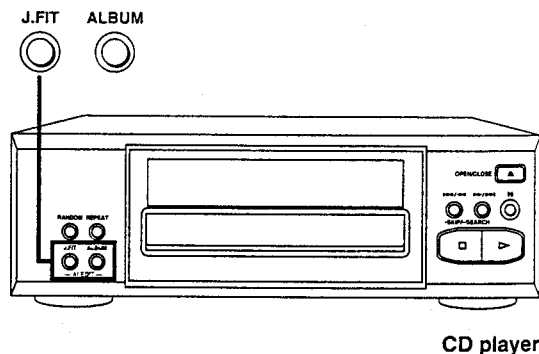
3 Press **DOLBY NR** to select **ON** or **OFF**. "B" lights up when the Dolby NR system is on.

4 Press **REV MODE** to select **↔** mode for automatic two-sided recording.

5 Press **▲ OPEN/CLOSE** to load a CD, and then press it again.



To start one-touch editing

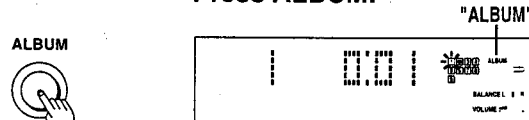


CD player

There are 2 types of one-touch editing.
Be sure to finish the procedure of "One-touch editing preparation" on the left of this page.

Editing of tracks in their original sequence (ALBUM)

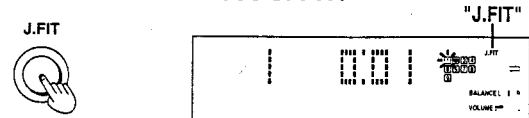
Press **ALBUM**.



The recording will start after the system completes the "One-touch editing operation" on page 29.

Allotting tracks to the tape without wasting tape space (J. FIT)

Press **J. FIT**.



The recording will start after the system completes the "One-touch editing operation" on page 29.

To cancel one-touch editing:

Press **□** on the cassette deck.
The CD player also stops.

Notes

- Use a tape of under 99 minutes.
- You cannot edit-record tracks numbering higher than 24.

One-touch editing operation:

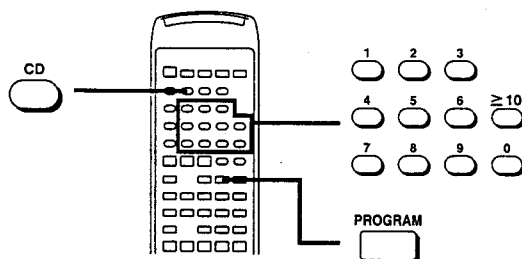
1. The cassette deck will fast-forward and rewind to measure its length.
2. The cassette deck will advance the tape beyond the leader tape, and then stop.
3. The CD player assigns tracks to tape side A and B, and the system displays the result. In addition to the above information, the remaining time of the tape side A and B will be also displayed.

When there are tracks allotted on tape side B:

After recording tracks allotted on tape side A, the cassette deck will continue recording making the blank portion on tape side A.

To specify the tracks to be edited:

You can specify the tracks to be edited using the program play procedure. (See page 21.)



After steps 5 on page 28,

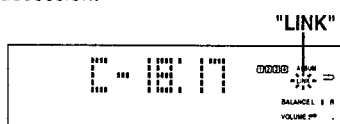
1. Press CD on the remote control.
2. Press PROGRAM on the remote control, and then specify the tracks to be recorded in the desired sequence.
3. Press one of the one-touch editing button (ALBUM, J. FIT) to start editing.

Note

You cannot program more than 24 tracks and tracks numbering higher than 24.

After the edit recording has finished:

The cassette deck automatically enters the recording standby mode. When "LINK" flashes, it means you can edit tracks from same or another CD in succession.

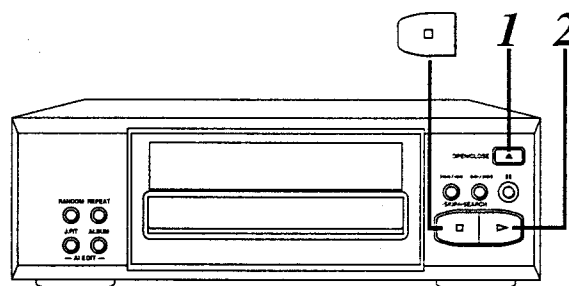


To stop the edit-recording:

Press □ on the CD player.

Linking up several discs (LINK)

You can link up another CD when "LINK" flashes after editing a CD.



CD player

1

OPEN/CLOSE

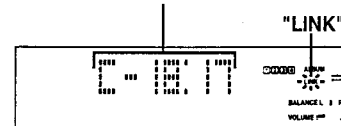


Press ▲ OPEN/CLOSE to replace the CD with another one.

Press ▲ OPEN/CLOSE again to close the disc tray.

The display shows the time remaining on the tape.

The time remaining on tape



2



Press ►.

The recording will start with the same editing mode of the first CD.

The system will assign tracks to be recorded on the remainder of the tape and display the results.

3

Repeat steps 1–2 to record more CDs.

To cancel the LINK function:

Press □ on the CD player.

To specify the tracks to be edited:

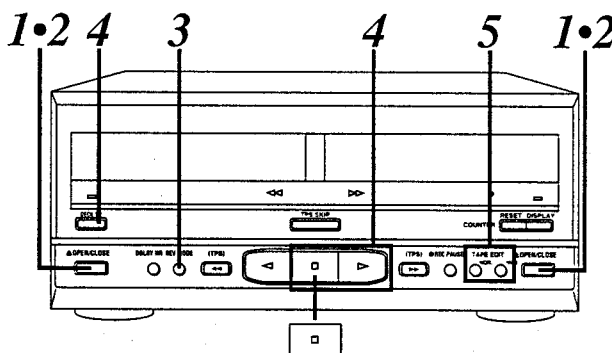
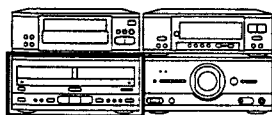
1. Replace the CD.
2. Press CD on the remote control.
3. Press PROGRAM on the remote control, and specify the track number you want to record using the program play procedure.
4. Press ► on the CD player.

Notes

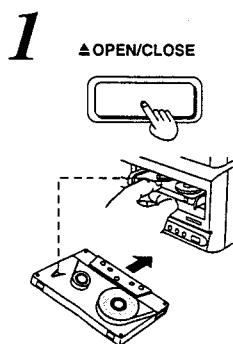
- When the display shows "0:00", you cannot record from another CD. Press □ on the CD player.
- If the time remaining on the tape is shorter than the length of the tracks to be recorded, you cannot record the tracks. Replace the CD with the tracks shorter than the time remaining on the tape or press □ on the CD player.

Tape-to-Tape Recording

The recording level and the noise reduction effect of the original (playback) tape will be recorded on the new tape.

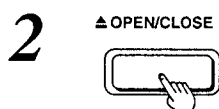


The leader tapes in both decks must be wound up beforehand.
(See page 24.)

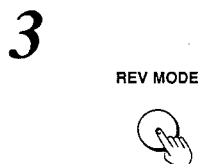


1 Press **▲ OPEN/CLOSE** on the both decks, and then insert the tapes.

For playback: Into deck 1
For recording: Into deck 2
The illustration shows an example when you start recording from the beginning of the tape side A (front side) with the "▶" playback button.
Insert the cassette tape until it touches the back of the compartment.

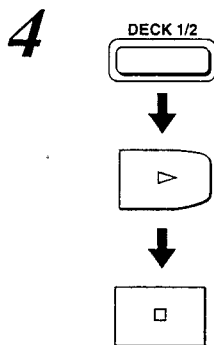


2 Press **▲ OPEN/CLOSE** to close each deck's holder.



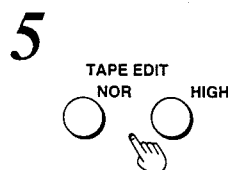
3 Press **REV MODE** to select the reverse mode.

◀▶ : Single-sided recording
▶▶ : Two-sided recording (forward side→reverse side)
◀◀ : Same as above. (When you press TAPE EDIT, "◀▶" will be automatically switched over to "▶▶".)



4 Set the tape direction to "▶" of deck 1 and 2.

Press DECK 1/2 and confirm both deck's tape directions are "▶".
To change the tape direction, first press ▶, and then ◻.
To record on the reverse side, set deck 2 to "◀".



5 Press **NOR** or **HIGH** of **TAPE EDIT** to start recording.

NOR: When you wish to monitor the sound while recording
HIGH: When you wish to record at high speed (about 2.0 times normal speed)

While recording, both deck 1 and 2 indicators light up. Tape direction indicator shows deck 2 direction.
Either of deck 1 or deck 2 stops, the other deck also stops.

To stop recording:

Press ◻.
Both decks will stop.

To enjoy another source while recording:

Start playing the other sound source.
You can change the volume level and tone quality without affecting the recording.

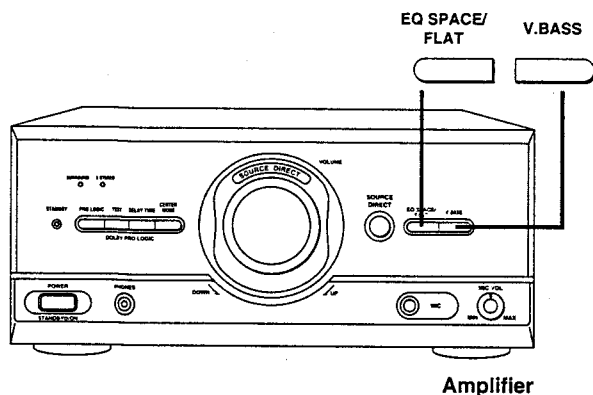
Notes

- Some TV sets generate noise that could be recorded during tape-to-tape recording. To prevent the possibility of this, do not use this system close to a TV set.
- Do not press ALBUM and J.FIT during tape-to-tape recording. It changes the tape-to-tape recording to the CD edit recording mode.

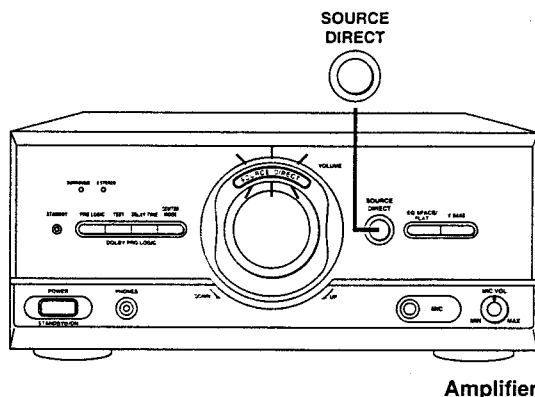
For your reference:

For optimum results, use an editing tape of the same or higher quality than the playback tape.

Changing the Tone

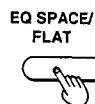


Amplifier



Amplifier

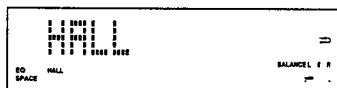
To retrieve the equalization curves and simulated listening environments



Press EQ SPACE/FLAT to select the mode.

Each time you press EQ SPACE/FLAT, EQ and SPACE modes will be switched as follows.

HALL → CLEAR → HEAVY → FLAT



1 HALL

Use to impart a deep bass and spread which will make you feel as if you were in a large concert hall.

2 CLEAR

Use to clarify the treble range of jazz, etc.

3 HEAVY

Use to add "punch" to rock and other music.

Notes

- You cannot record with HALL, CLEAR or HEAVY mode.
- "HALL", "CLEAR" and "HEAVY" indicator light off while recording, and light up when the recording finishes.

To obtain even higher quality sound from a CD or other source



Press SOURCE DIRECT to ON.

The SOURCE DIRECT indicator on the volume control lights up.

The sound signal will be transmitted without passing through the graphic equalizer and other circuits, thus providing even higher quality sound.

To cancel the SOURCE DIRECT mode, press the button again.

The SOURCE DIRECT indicator lights off, and the FLAT mode is selected.

Notes

- When this button is set to the "ON" position, any tonal effect (HALL, CLEAR, HEAVY, V. BASS) and KARAOKE mode will be cancelled.
- When you connect the microphone;
 - While the SOURCE DIRECT mode is ON, the SOURCE DIRECT mode will be cancelled and the FLAT mode is selected.
 - You cannot switch on the SOURCE DIRECT mode.

To listen with augmented bass (V. BASS)

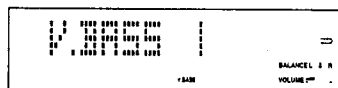


Press V. BASS.

Each time you press the button, the display will change as follows:

V. BASS 1 → V. BASS 2 → OFF

- V. BASS 2 is more effective than V. BASS 1.



Note

You cannot record with the V. BASS effect.

"V. BASS" effect added only to the sound heard through the speakers or headphones.

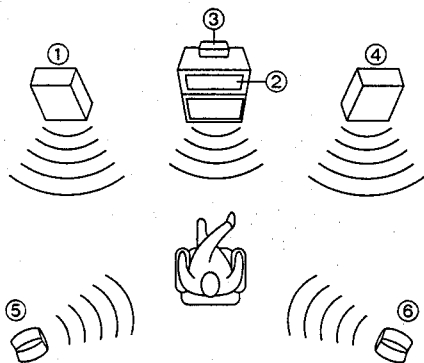
Using the Dolby Pro-Logic Surround

By combining front, center and surround speakers, you can enjoy the SURROUND mode which conveys a feeling of presence or the 3 STEREO mode which conveys a feeling of orientation.

SURROUND

By reproducing the feeling of depth and movement of sound, video software or compact discs recorded with Dolby Surround provide the listener with a feeling of presence like that of a movie theater.

Installation example:

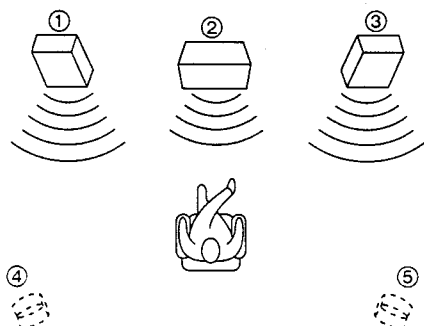


- ① Front speaker (L)
 - ② TV
 - ③ Center speaker
 - ④ Front speaker (R)
 - ⑤ Surround speaker (L)
 - ⑥ Surround speaker (R)
- To enjoy SURROUND, be sure to connect the surround speakers.

3 STEREO

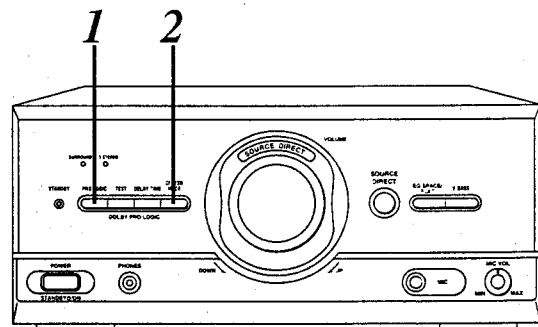
You can enjoy audio/video sources with clear sound, more presence and a good feeling of orientation. 3 STEREO can be used with sources not recorded in DOLBY SURROUND.

Installation example:



- ① Front speaker (L)
 - ② Center speaker
 - ③ Front speaker (R)
 - ④ Surround speaker (L)
 - ⑤ Surround speaker (R)
- To enjoy 3 STEREO, be sure to connect the center speaker.

Setting the center mode



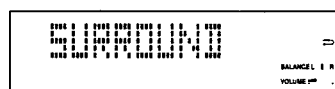
Amplifier

For Dolby Pro Logic systems, center mode setting is necessary to play back bass sounds effectively. Set the center mode in accordance with the size of your center speaker.

1 Press PRO LOGIC to turn on the Dolby Pro Logic systems and select the desired mode.

Each time you press the button, the display will change as follows:

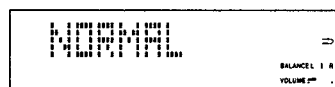
SURROUND → 3 STEREO → OFF



2 Press CENTER MODE to select the correct center mode.

Each time you press the button, the display will change as follows:

NORMAL → WIDE → PHANTOM



Note

"PHANTOM" will not be displayed when you select "3 STEREO" in step 1.

NORMAL:

When the center speaker is smaller than the front speakers

WIDE:

When the center speaker is the same or larger size as the front speakers

PHANTOM:

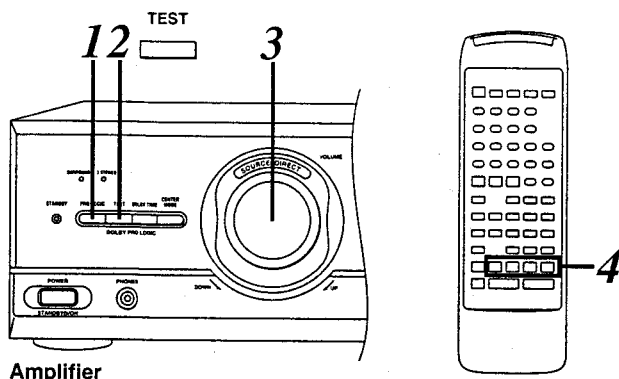
When no center speaker is connected.

Note

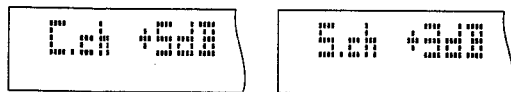
In the PHANTOM mode, the sound which would have been sent to the center speaker will be divided equally between both the left and right front speakers.

Adjusting speaker output level

In order to reproduce the movement of the sound and its clear orientation, it is important to adjust the output level of each speaker. Adjust output to the correct levels while listening to the test signal.



- 1 Press PRO LOGIC to turn on the Dolby Pro Logic systems and select the desired mode.
- 2 Press TEST to output a test signal.
The test signal is emitted in the following order:
For SURROUND mode
Front speaker (left) → Center speaker
Surround speakers (left, right) ← Front speaker (right)
Note
The test signal is not emitted from the center speaker when the center mode is on PHANTOM.
For 3 STEREO mode
Front speaker (left) → Center speaker
Front speaker (right) ← Center speaker
- 3 Turn VOLUME to set the volume level normally used for enjoying the source.
- 4 Press CENTER (–) or (+) or SURROUND (–) or (+) on the remote control to adjust the output level balance.



Adjust the output level of each speaker from the listening position until they are all identical. Output levels can be varied within a range of ± 12 dB with front speaker output level serving as the zero point.

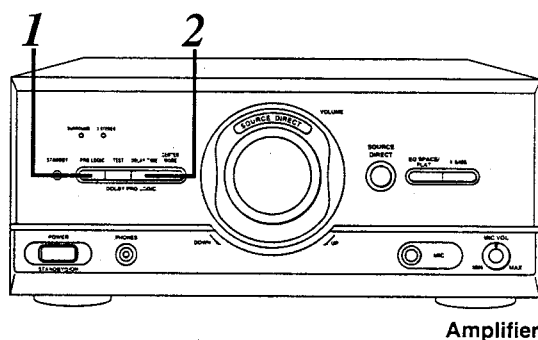
Notes

- The test signal is output only by the speaker you are now adjusting and does not repeat the sequence until adjustments are complete.
- Remember you cannot adjust output level of the surround speakers if you selected the 3 STEREO mode in step 2.

To stop the test signal:
Press TEST.

Adjusting the delay time

(When enjoying with SURROUND only)



Adjust the sound from the surround speakers until the proper effect is produced.

- 1 Press PRO LOGIC to turn on the Dolby Pro Logic systems and select the SURROUND mode.
- 2 Press DELAY TIME to set to the suitable time.
When the button is pressed, the current delay time is displayed, pressing it again changes the delay time. Each time the button is pressed, the delay time will increase by 5 ms.
20 ms → 25 ms → 30 ms → 15 ms

To calculate the delay time, refer to the calculation methods.

The standard setting is 20 ms.
D1: Distance from front speakers
D2: Distance from surround speakers

If D1 is equal to or less than D2:
Set to 15 ms.

If D2 is less than D1:
Start at 15 ms and increase by 5 ms for every 1.5 m of difference between D1 and D2.

Enjoying with SURROUND or 3 STEREO

Make sure that you have set the center mode and adjusted speaker output level.

- 1 Press PRO LOGIC to turn on the Dolby Pro Logic systems and select the desired mode.
- 2 Select the desired source.
- 3 Start the desired source.

Note

When employing SURROUND, use software recorded in Dolby Surround.

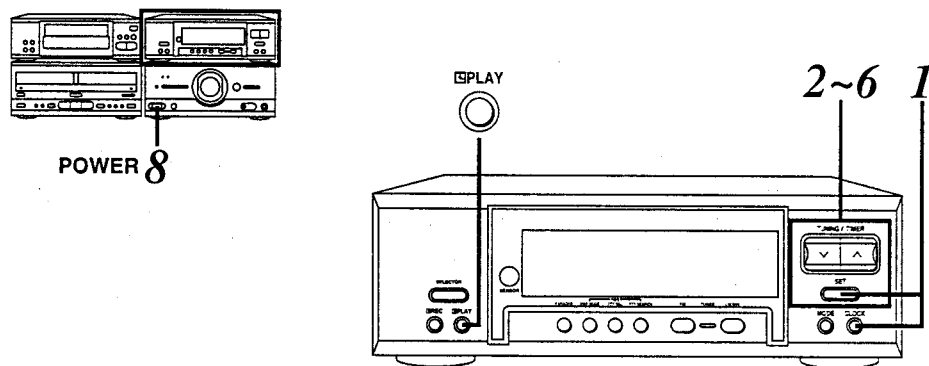
To turn off the Dolby Pro Logic systems:
Press PRO LOGIC to select "OFF".

Manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Using the Timer

Setting the play timer

Make sure that you have completed "Setting the Time" on page 12.
Select this timer when you want to use the timer as an alarm clock.
You can wake up with listening to music (CD, tuner, tape) at a desired volume level and time.



The following example in the figure shows how to set the play timer for; playing a CD at -40 dB everyday from Monday through Friday 6:30 to 7:40.

Switch on the power.

1

① **TIMER/CLOCK**

② **SET**

① Press **TIMER/CLOCK** to select "PLAY".
"PLAY" indicator lights up.

② Press **SET**.

Within 8 seconds:

② Press **SET**.

2

① **TUNING / TIMER**

② **SET**

① Press **TUNING/TIMER** ∇ or $\wedge$ to select the day.
Refer to "About the variation of the day setting" on page 35.

② Press **SET**.

3

① **TUNING / TIMER**

② **SET**

③ **TUNING / TIMER**

④ **SET**

① Press **TUNING/TIMER** ∇ or $\wedge$ to select the hour.

② Press **SET**.

③ Press **TUNING/TIMER** ∇ or $\wedge$ to select the minutes.

④ Press **SET**.

4

① **TUNING / TIMER**

② **SET**

③ **TUNING / TIMER**

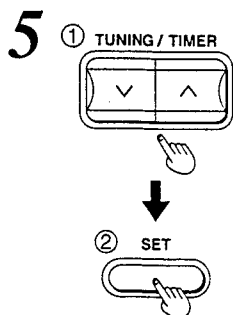
④ **SET**

① Press **TUNING/TIMER** ∇ or $\wedge$ to select the hour.

② Press **SET**.

③ Press **TUNING/TIMER** ∇ or $\wedge$ to select the minutes.

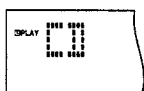
④ Press **SET**.



① Press TUNING/TIMER ∇ or $\blacktriangle$ to select the desired source.

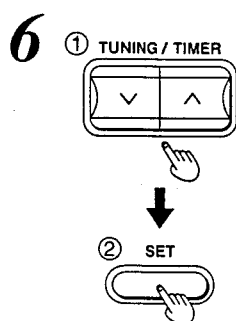
Each time you press TUNING/TIMER $\blacktriangle$, sources will be switched as follows.

CD $\rightarrow$ TAPE $\rightarrow$ TUNER

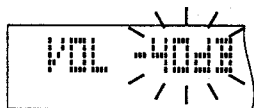


② Press SET.

When you select "TUNER", select a desired preset channel using TUNING/TIMER ∇ or $\blacktriangle$, and then press SET.



① Press TUNING/TIMER ∇ or $\blacktriangle$ to select the volume level for the timer play.



② Press SET.

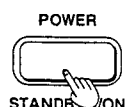
The display will show the day, ON time, OFF time, the source you select, and the volume level alternately, and then resumes the previous display.

7

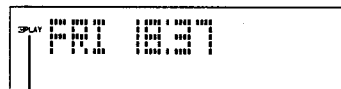
Prepare for the play.

When you play a CD: Load a CD.
When you play a tape: Load a tape.

8



Press POWER to switch the power to standby mode.



"PWR"

Please confirm "PWR".

The timer play will start at the preset time with volume increasing gradually up to the volume level you preset.

About the variation of the day setting:

One day from

Sunday to Saturday: SUN...SAT

Everyday from

Sunday to Saturday: SUN TO SAT

Everyday from

Monday to Saturday: MON TO SAT

Everyday from

Monday to Friday: MON TO FRI

Saturday and

Sunday only: SAT TO SUN

To confirm the play timer:

Press TIMER/CLOCK to show "PWR".

The display will show the day, ON time, OFF time, the source you select, and the volume level alternately.

To change the play timer setting:

Follow the procedure from the first step.

Using the timer at the same time setting continuously:

You can accomplish this even if the system is in the standby mode.

The play timer setting will stay in the memory.

1. Press PWR to show "PWR".

2. Press POWER to switch the power to standby mode.

To enjoy the desired source after the timer setting is completed:

1. Start playing the desired source.

Even if you change the volume level or music source, the timer play will start with the preset condition.

2. Press POWER to standby mode after enjoying the play.

Notes

- If the power is on, the timer will not function. The system must be in the standby mode.
- This system retains the ON/OFF time settings until you make a new setting. If you make a new ON time setting, the previous OFF time setting will change to the same setting.
- You cannot make the ON time and OFF time same setting.
- The play timer will function until you cancel the play timer mode. When the display shows "PWR", the play timer will be activated.
- If you switch the power to standby mode while play timer is functioning, the OFF time setting will not be activated.

For your reference:

When you insert cassettes in both deck 1 and 2, deck 1 has priority for timer play on tape.

To cancel the timer:

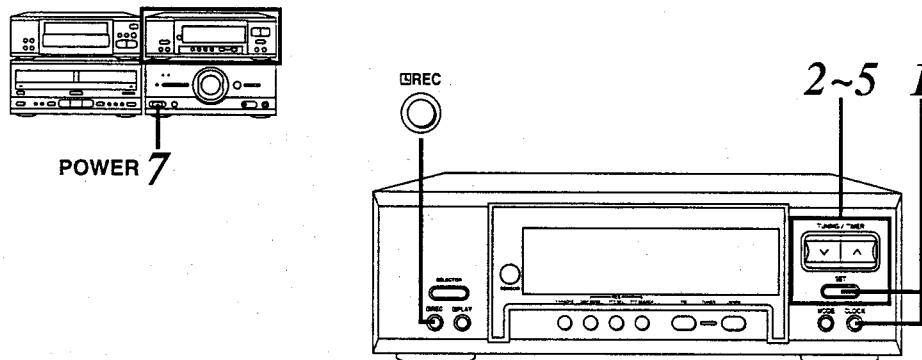
Press PWR to go out "PWR".

If you make an error:

Press TIMER/CLOCK to return to the first step.

Setting the record timer

Make sure that you have completed "Setting the Time" on page 12. Select this timer when you want to use the timer to record a midnight program or while you are out. The system will record a desired radio broadcast at a desired time.



The following example in the figure shows how to set the record timer for; recording preset channel no. 1 on Saturday from 18:30 to 20:00.

Switch on the power.

1

① **TIMER/CLOCK**

② **SET**

① Press **TIMER/CLOCK** to select "REC".
"REC" indicator lights.

② Press **SET**.

Within 8 seconds:

2

① **TUNING / TIMER**

② **SET**

① Press **TUNING/TIMER** ∨ or ∧ to select the day.
Refer to "About the variation of the day setting" on page 37.

② Press **SET**.

3

① **TUNING / TIMER** ("ON" time setting)

② **SET**

③ **TUNING / TIMER**

④ **SET**

① Press **TUNING/TIMER** ∨ or ∧ to select the hour.

② Press **SET**.

③ Press **TUNING/TIMER** ∨ or ∧ to select the minutes.

④ Press **SET**.

4

① **TUNING / TIMER** ("OFF" time setting)

② **SET**

③ **TUNING / TIMER**

④ **SET**

① Press **TUNING/TIMER** ∨ or ∧ to select the hour.

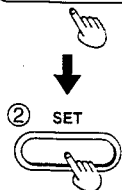
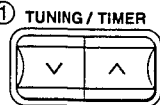
② Press **SET**.

③ Press **TUNING/TIMER** ∨ or ∧ to select the minutes.

④ Press **SET**.

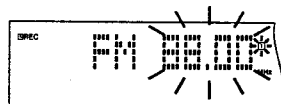
5

① Press TUNING/TIMER ∇ or $\wedge$ to select the desired pre-set channel.



Each time you press TUNING/TIMER $\wedge$, the preset channel will be switched as follows.

CH1 $\rightarrow$ CH2...CH38 $\rightarrow$ CH39



If you press TUNING/TIMER ∇ , the reverse operation will take place.

② Press SET.

The display will show the day, ON time, OFF time, the broadcast station you select alternately, and then resumes the previous display.

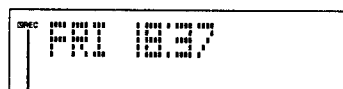
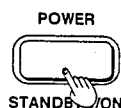
6

Prepare for recording.

1. Insert a tape into deck 2.
2. Select the Dolby NR mode.
3. Select the reverse mode.
4. Select the tape travel direction.

7

Press POWER to switch the power to standby mode.



"REC"

Please confirm "REC".

The tuner recording will start 30 seconds before the setting time.

The sound will be automatically muted during timer recording.

To change the record timer setting:

Follow the procedure from the first step.

Using the timer at the same time setting continuously:

You can accomplish this even if the system is in the standby mode. The record timer setting will stay in the memory.

1. Press $\square$ REC to show " $\square$ REC".
2. Press POWER to switch the power to standby mode.

To enjoy the desired source after the timer setting is completed:

1. Start playing the desired source.
When listening to a cassette tape, use the deck 1.
Even if you change the music source, the timer recording will start with the preset condition.
2. Press POWER to standby mode after enjoy the play.

Notes

- If the power is on, the timer will not function.
- This system retains the ON/OFF time settings until you make a new setting. If you make a new ON time setting, the previous OFF time setting will change to the same setting.
- You cannot make the ON time and OFF time same setting.
- Once the record timer operation finishes, it clears the record timer mode (except for everyday mode "SUN TO SAT"). When the display shows " $\square$ REC", the record timer will be activated.
- If you switch the power to standby mode while record timer is functioning, the OFF time setting will not be activated.

For your reference:

When you want to record a same program over several weeks (except when you select everyday mode "SUN TO SAT"), press $\square$ REC to show " $\square$ REC" after the timer recording has finished.

To cancel the timer:

Press $\square$ REC to go out " $\square$ REC".

If you make an error:

Press TIMER/CLOCK to return to the first step.

About the variation of the day setting:

One day from

Sunday to Saturday: SUN...SAT

Everyday from

Sunday to Saturday: SUN TO SAT

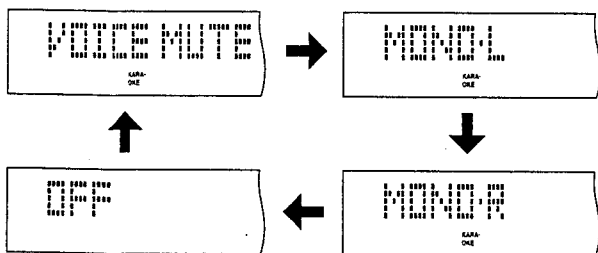
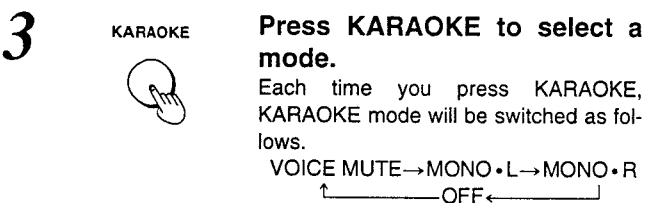
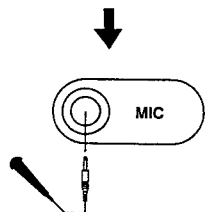
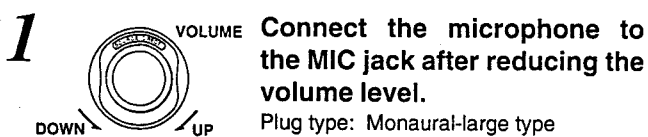
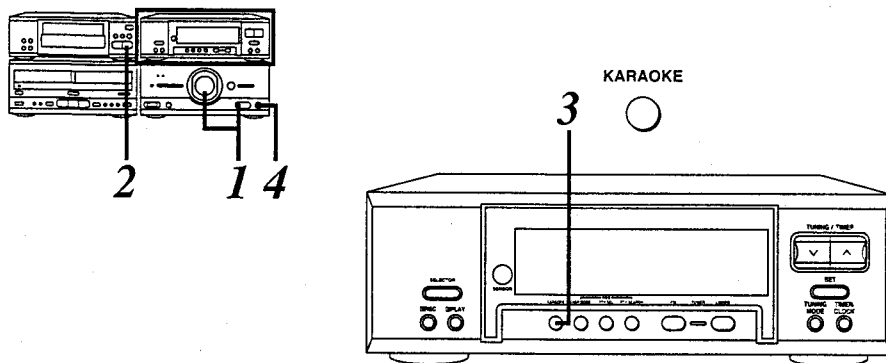
To confirm the record timer:

Press TIMER/CLOCK to show " $\square$ REC".

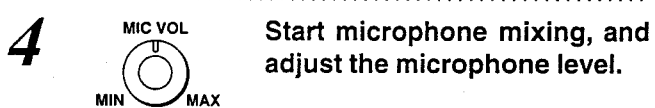
The display will show the day, ON time, OFF time, the broadcast station you select alternately.

Enjoying the Microphone Mixing

This function enables you to enjoy KARAOKE.



VOICE MUTE	You can use a normal CD.
MONO • L or MONO • R	You can use a sound multiplex CD, or multiplex tape.
OFF	You can use normal karaoke tape, a normal karaoke CD.



To cancel the “KARAOKE” mode:

Press KARAOKE to go out the KARAOKE mode indicator.

When "VOICE MUTE" lights: Press 3 times.

When "MONO•L" lights: Press twice.

When "MONO • R" lights: Press once.

To record of your “KARAOKE” performance:

Start recording in deck 2, then start "KARAOKE" performance.

To playback the tape recorded in "KARAOKE" mode, press KARAOKE to go out the KARAOKE mode indicator.

You cannot use “KARAOKE” function with:

- a tone quality effect (HALL, CLEAR, HEAVY)
- a radio source

You cannot record in “KARAOKE” mode using:

- a tone quality effect (HALL, CLEAR, HEAVY and V. BASS effect)
- a radio and a tape sources

Notes

- This function may not be effective according to the type of music.
- Do not press KARAOKE while recording.
- If you hear strange noises (squealing or howling) during mixing, move the microphone farther away from the speakers or turn down the volume and microphone volume on the amplifier.
- When you are not using the microphone, disconnect it from the MIC jack, and turn down the microphone volume level to MIN.

To record your voice:

1. Connect the microphone to the MIC jack.
2. Press **SELECTOR** to select "TAPE".
3. Press **REC PAUSE** to put the cassette deck into the recording standby mode.
4. Press **◀** or **▶** to start recording.
5. Adjust the microphone volume level.
6. Speak to the microphone.

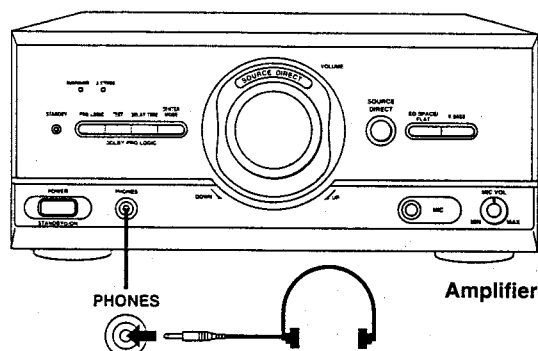
Note

You cannot record through the microphone with the Dolby Pro-Logic mode on.

Using an External Unit

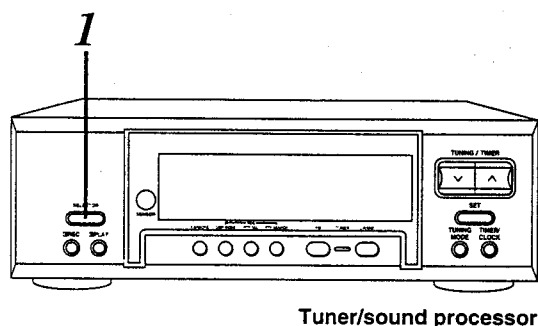
To use headphones

Connect the headphones to the headphones jack.
Before connecting, reduce the volume level.



- Avoid listening for prolonged periods of time to prevent hearing damage.
- Plug type: Stereo mini type

Listening to an external source



The following example in the figure shows when you select analog player.

When you play the unit which is connected to the "EXTERNAL" terminal, select "EXT".

1 **SELECTOR**

Press **SELECTOR** to select "PHONO".

Each time you press SELECTOR, sound sources will be switched as follows.

TUNER → CD → TAPE → EXT

↑ ↓

PHONO ← VDP ← VCR

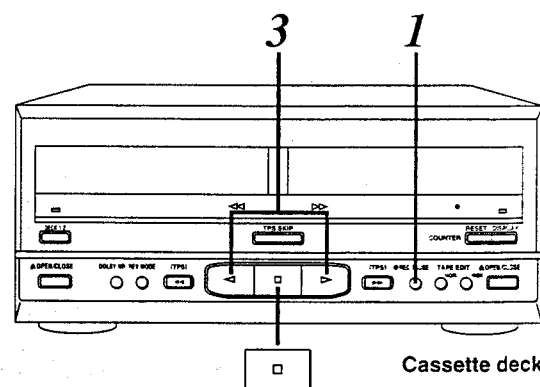
The digital display shows the word 'PHONO' in large characters. To the right of the display, there are smaller indicators for 'BALANCE' and 'VOLUME'.

2

Operate the unit which is connected to the system.

See the instruction manual of the unit concerned for the operation.

Recording from an external source



The following example in the figure shows when you record from an analog player.

When you play the unit which is connected to the "EXTERNAL" terminal, select "EXT".

1 **REC PAUSE**

Press **REC PAUSE** to put the cassette deck into the recording standby mode.

2 **SELECTOR**

Press **SELECTOR** on the tuner/sound processor to select "PHONO".

The digital display shows the word 'PHONO' in large characters. To the right of the display, there are smaller indicators for 'BALANCE' and 'VOLUME'.

3

Press ◀ or ▶ to start recording.

4

Start playing the source to be recorded.

See the instruction manual of the unit concerned for the operation.

To stop recording:

Press □.

To briefly interrupt recording:

Press REC PAUSE.

The cassette deck will go into the recording standby mode.

To resume recording:

Press ◀ or ▶ corresponding to the direction in which recording is taking place.

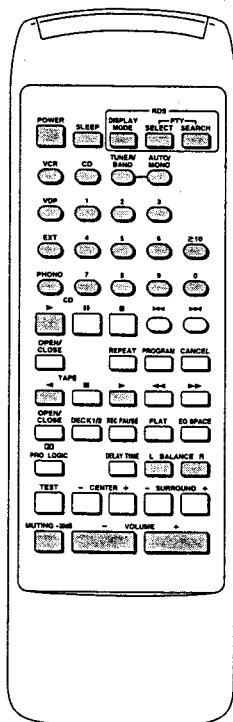
Recording on an external unit

Start recording on an external unit, and then start playing the source to be recorded.

Notes

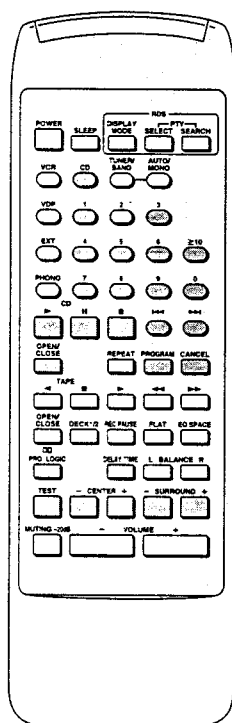
- You cannot record the sound with the equalization curve, simulated listening environment, and V. BASS effect on an external unit.
- Do not press KARAOKE when recording on an external unit.

Quick Reference of Remote Control Operations

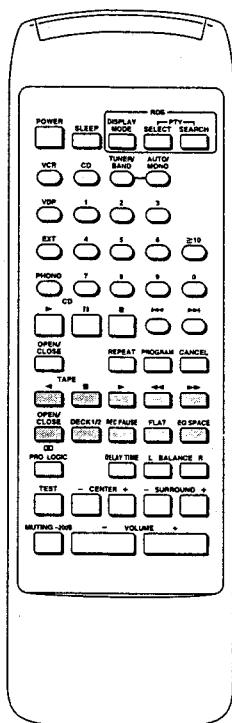


<i>Common operation</i>	
Switching the system on and power standby mode	POWER
Starting play directly from the power standby condition	TUNER/BAND CD TAPE
Selecting the input source	VCR CD VDP EXT PHONO
Adjusting the volume	~VOLUME+
Adjusting the volume balance	L BALANCE R
Muting the volume temporarily	MUTING -20dB
<i>Tuner/timer operation</i>	
Listening to the radio broadcasts	TUNER/BAND →
Switching between FM stereo mode and monaural	AUTO/MONO
Displaying the name of a broadcast station	DISPLAY MODE
Listening to a program of a particular type	SELECT → SEARCH
Operating/releasing the sleep timer	SLEEP

Quick Reference of Remote Control Operations



Compact disc section	
Opening or closing the disc tray	OPEN/ CLOSE
Starting play	
Temporarily stopping play	
Stopping play	
Skipping tracks	
Repeating play	REPEAT
Starting play from a particular track	CD →
Playing the particular track you programmed	CD → PROGRAM →
Cancelling the particular track you programmed	CD → CANCEL →
Dolby Pro-Logic Surround operation	
Switching between Dolby Pro-Logic Surround modes	CD PRO LOGIC
Adjusting the delay time	DELAY TIME
Activating the test signal sound	TEST
Adjusting the center speaker level	- CENTER +
Adjusting the surround speaker level	- SURROUND +



<i>Tape section</i>	
Opening or closing the cassette holder	OPEN/ CLOSE
Switching between deck 1 and deck 2	DECK1/2
Starting playback	TAPE
Fast forwarding or rewinding the tape	(In the stop mode)
Finding the beginning of a track	(During playback)
Stopping playback and recording	
Recording	REC PAUSE
<i>Tone control section</i>	
Switching between equalization curve and simulated listening environments	EQ SPACE
Switching equalization curve or simulated listening environment to off	FLAT

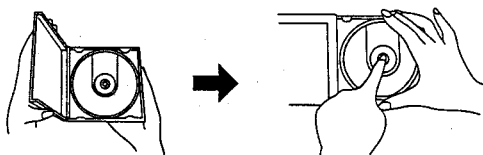
Concerning Compact Discs

Only compact discs having this mark can be used with this unit.



■ To remove a disc from its case

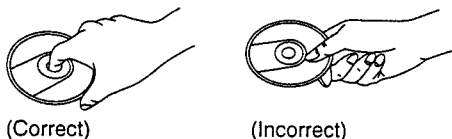
Press the center holder and lift the disc holding by the edges.



■ To hold the disc

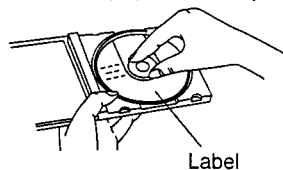
Hold the disc by the edges so the surface is not soiled with fingerprints.

Fingerprints, dirt and scratches can cause skipping and distortion.



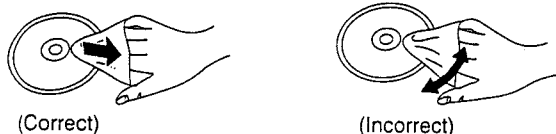
■ To store a disc in its case

Insert the disc with label facing upwards and press downward at the center.



■ If the surface is soiled

Wipe gently with a soft, damp (water only) cloth.



■ If the disc is brought from a cold to a warm environment, moisture may form on the disc

Wipe this moisture off with a soft, dry, lint-free cloth before using the disc.

Improper disc storage:

You can damage discs if you store them in the following places:

- Areas exposed to direct sunlight
- Humid or dusty areas
- Areas directly exposed to a heat outlet or heating appliance

Handling precautions:

- Do not write on the label side with a ball-point pen or other writing utensils.
- Do not use record cleaning sprays, benzene, thinner, static electricity prevention liquids or any other solvent.
- Do not soil with fingerprints.

Concerning Cassette Tapes

■ Selection of cassette tapes

You can use normal, high position, and metal tapes for playback and recording:

The deck automatically identifies the kind of tape loaded, and sets the bias (for recording), recording level, equalization accordingly.

Cassette tape exceeding 90 minutes:

These tapes are handy for their long playback and recording time but be careful about repeatedly stopping, starting, rewinding and fast forwarding these tapes in short intervals as they are thin, tend to stretch and may become entangled in the mechanism.

Endless tapes:

Failure to operate these tapes correctly may cause the tape to wind around the revolving parts.

For this unit, it is recommended to use the tape which is appropriate to the auto reverse mechanism.

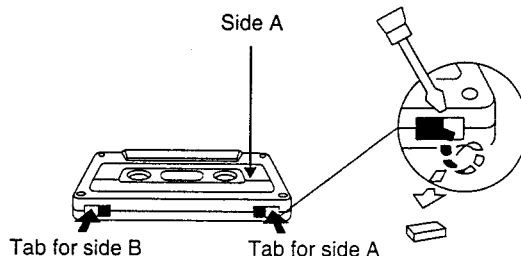
■ If the tape loosens, take up the slack

Tape slack may cause the tape to break.

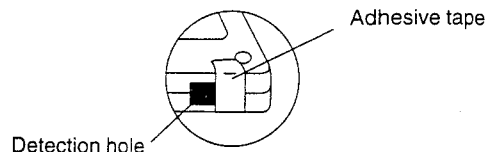


■ To prevent erasure of recorded sounds

Remove the tabs with a screwdriver or a similar object.



To re-record on a protected cassette, cover the slot with adhesive tape.



Do not cover the detection holes on high position and metal tapes.

■ Improper tape storage:

You can damage tapes if you store them in the following places;

- In high temperature (35°C or higher) or high humidity (80% or higher) areas
- In a strong magnetic field (near a speaker, on top of a TV, etc.) This can erase a recording.
- Areas exposed to direct sunlight

Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
---------	-------------------	------------------

Problems common to all systems

There is no sound when the power is ON.	Volume is set too low.	Adjust the volume level with the volume control on the amplifier.
The location of the various musical instruments is not well defined.	The (+) and (–) connections to one of the speakers are reversed.	Connect the speaker cord correctly.
The left and right sounds are reversed.	The left and right connections to the speaker are reversed.	Connect the speaker cords correctly.
When listening to the external unit, the left and right sounds are reversed.	The left and right connections to the external unit are reversed.	Connect the external unit's cord correctly.
Only one speaker is emitting sound.	One of the wires of the speaker cord is disconnected.	Connect the speaker cord correctly.
There is no sound when a source is being played.	The (+) and (–) wire of the speaker cords are shorted.	Switch the system to the standby mode, and reconnect the speaker cords so that they are not shorted. Then switch on the power.
<u>"U70" appears on the display.</u>	Flat cables are not connected steadily.	Connect the flat cable steadily. When the "U70" display is not cleared after the flat cable have been connected properly, the unit may be damaged. Consult your dealer.

While listening to FM broadcasts

There is a "rushing noise" during a stereo broadcast which is not audible during a monaural broadcast.	The transmitting station is a long distance away.	• If you are using an indoor antenna, change to an outdoor antenna. • If you are using a high-grade outdoor antenna, try changing the installation location, height, and orientation.
You hear excessive noise during a stereo broadcast, and occasionally the sound disappears.	The installation location and orientation of the antenna are unsuitable.	
The stereo indicator flickers and does not light completely.	The transmitting station is a long distance away. The power of the TV set or VCR is ON.	Try switching off the TV set or VCR.
The sound during a stereo broadcast is highly distorted.	There is a building or mountain nearby. [Distortion is caused by interference between the signal from the transmitting station (direct wave) and the signal reflected from the building or mountain (reflected wave).]	Use a high-grade outdoor antenna, and install it in a good location, height, and orientation for reception.

While listening to LW/MW broadcasts

You hear an unusual beat sound.	You are using the system at the same time you are playing a TV set.	Switch off the TV set, or use the system further away from it.
You hear a low-frequency hum.	The antenna wire is near the power cord.	Separate the antenna wire from the power cord.

When there is a television set nearby

The picture on the TV disappears or stripes appear on the screen.	The location and orientation of the antenna are incorrect.	If you are using an indoor antenna, change to an outdoor antenna.
	The wiring at the back of the system is unsuitable.	Separate the antenna wire of the TV set from the system.

Troubleshooting Guide

Problem	Probable cause(s)	Suggested remedy
While listening to tapes		
Sound is low, intermittent, or poor quality, noisy, scratchy, or unsteady.	Heads are dirty.	Clean the heads.
	Dolby noise reductions is set in the wrong position.	Set it to match the Dolby NR recording mode.
The deck does not enter the recording mode.	The erase-prevention tabs are removed from the cassette.	Attach tape to cover the space left by removal of the erase-prevention tabs.
While listening to compact discs		
The display will not show the correct indication. Disc play does not start when you press the play button.	The disc is not positioned correctly in the disc tray.	Load the disc on the tray correctly.
	The disc is loaded upside down.	Reload the disc.
	The disc is dirty.	Wipe the disc with a soft cloth.
	The disc is scratched.	Replace the disc with a new one.
	The disc is badly warped.	
	The disc is a nonstandard one.	Replace the disc with a different one.
	There is condensation inside the compact disc player.	Switch the power ON, and then wait for 60 minutes before using the compact disc player.
While using the remote control		
The system cannot be operated with the remote control.	The batteries are installed in the reverse polarity.	Re-insert the batteries in the correct polarity.
	The batteries are worn.	Replace the batteries with new batteries.

The servicer will require all components to service your system. Therefore, should service ever be necessary, be sure to bring the entire system.

Maintenance

■ Maintenance of external surfaces

To clean this unit, use a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and-water solution or a weak detergent solution.

Wring the cloth well before wiping the unit.

Wipe once again with a soft, dry cloth.

Never use alcohol, paint thinner, benzine, or chemically treated cloths to clean this unit. Such chemicals may damage the finish of your system.

■ Tape head care

To assure sound quality for recording and playback, be sure to clean the heads after approximately every 10 hours of use by the cleaning tape (sold separately).

Technical Specifications

TUNER/SOUND PROCESSOR

■ Pre-amplifier section

Input sensitivity/impedance	
PHONO	2.5 mV/47 k Ω
EXTERNAL, VCR, VDP	250 mV/15 k Ω
Output level	
EXTERNAL RECOUT	150 mV/1.5 k Ω
Frequency response	
PHONO	30 Hz–15 kHz/+1.5 to –2.0 dB
EXTERNAL, VCR, VDP	20 Hz–40 kHz

■ DOLBY PRO LOGIC section

PRO LOGIC mode	SURROUND, 3 STEREO
CENTER mode	NORMAL, WIDE, PHANTOM
DELAY TIME	15, 20, 25, 30 ms

■ EQ, SFP section

EQ SPACE mode	
3 modes	HALL, CLEAR, HEAVY

■ FM tuner section

Frequency range	87.50–108.00 MHz (0.05 MHz steps)
Sensitivity	1.8 μ V (IHF usable)
S/N 26 dB	1.5 μ V
S/N	
MONO	70 dB (75 dB, IHF)
Stereo separation	
1 kHz	35 dB
Antenna terminal(s)	75 Ω (unbalance)

■ AM tuner section

Frequency range	
MW	522–1611 kHz (9 kHz steps)
LW	530–1620 kHz (10 kHz steps)
	144–288 kHz (9 kHz steps)
Sensitivity (S/N 20 dB)	
MW	500 μ V/m
LW	50 μ V

■ Timer section

Clock	Quartz-lock type
Function	24-hour programmable; Play timer (1 time), Rec timer (1 time), Sleep (120 min, 30 min intervals)
Setting	1 minute–23 hours 59 minutes (1 min intervals)

■ General

Dimensions (W×H×D)	270×89×274 mm
Weight	1.7 kg

AMPLIFIER

■ Amplifier section

Power output	
DIN 1 kHz, THD 1%, both channels driven	2×50 W (6 Ω)
RMS 1 kHz, THD 10%, both channels driven	2×70 W (6 Ω)

PRO LOGIC mode

DIN 1 kHz, THD 1%	
MAIN (both channels driven)	2×40 W (6 Ω)
	40 W (4 Ω +4 Ω)
SURROUND	40 W (8 Ω)
CENTER	
RMS 1 kHz, THD 10%	
MAIN (both channels driven)	2×50 W (6 Ω)
	50 W (4 Ω +4 Ω)
SURROUND	50 W (8 Ω)
CENTER	

Total harmonic distortion

Rated power at 1 kHz	1% (6 Ω)
Half power at 1 kHz	0.09% (6 Ω)
Load impedance	
MAIN	6–8 Ω
SURROUND	4–8 Ω
CENTER	8 Ω
S/N (rated power)	
MAIN	90 dB

■ General

Power consumption	213 W
Power supply	230 V–240 V, AC 50/60 Hz
Dimensions (W×H×D)	270×118.5×341.5 mm
Weight	4.8 kg

CD PLAYER

■ Audio

DA converter	1 bit 2 DAC MASH
--------------	------------------

■ Pickup

Wavelength	780 nm
------------	--------

■ General

Dimensions (W×H×D)	270×89×266 mm
Weight	1.5 kg

CASSETTE DECK

Deck system	Stereo cassette deck
Track system	4 track, 2 channel
Recording system	AC bias
Bias frequency	100 kHz
Erasing system	AC erase

Heads

Deck 1	
(Playback head)	Permalloy head
Deck 2	
(Recording/Playback head)	Permalloy head
(Erasing head)	Double gap ferrite head

Motors

Deck 1, 2	
Capstan drive	DC servo motor
Reel table drive	DC motor
Tape speed	4.8 cm/s
Wow and flutter	0.1% (WRMS)

Fast forward and rewind times

Approx. 52 seconds	
with C-60 cassette tape	

Frequency response

(Dolby NR off)	
NORMAL	20 Hz–16 kHz (DIN)
CrO ₂	20 Hz–16 kHz (DIN)
METAL	20 Hz–16 kHz (DIN)

S/N (Signal level=max recording level, CrO₂)

NR off	56 dB (A weighted)
Dolby NR B on	66 dB (A weighted)

Input sensitivity and impedance

REC (IN)	400 mV/23 k Ω
----------	----------------------

Output voltage and impedance

PLAY (OUT)	280 mV/220 Ω
------------	---------------------

■ General

Dimensions (W×H×D)	270×118.5×262 mm
Weight	2.3 kg

FRONT SPEAKER

Type	3 way, 3 speakers, Bass-Reflex
Speaker(s)	
Woofer:	14 cm cone type
Midrange:	6 cm cone type
Tweeter:	Dome type
Impedance	6 Ω
Input power	100 W (music), 50 W (DIN)
Output sound pressure level	86 dB/W (1.0 m)
Cross over frequency	2.9 kHz, 10 kHz
Frequency range	38 Hz–22 kHz (–16 dB)

■ General

Dimensions (W×H×D)	230×413×264 mm
Weight	4.7 kg

SURROUND SPEAKER

Type	1 way, 1 speaker, closed
Speaker(s)	
Fullrange:	8 cm cone type
Impedance	4 Ω
Input power	40 W (music), 20 W (DIN)
Output sound pressure level	82 dB/W (1.0 m)
Frequency range	110 Hz–22 kHz (–16 dB)

■ General

Dimensions (W×H×D)	110×141×125 mm
Weight	0.5 kg

Notes:

- Specifications are subject to change without notice.
Weight and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

MASH is a trademark of NTT.

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

Printed in Japan

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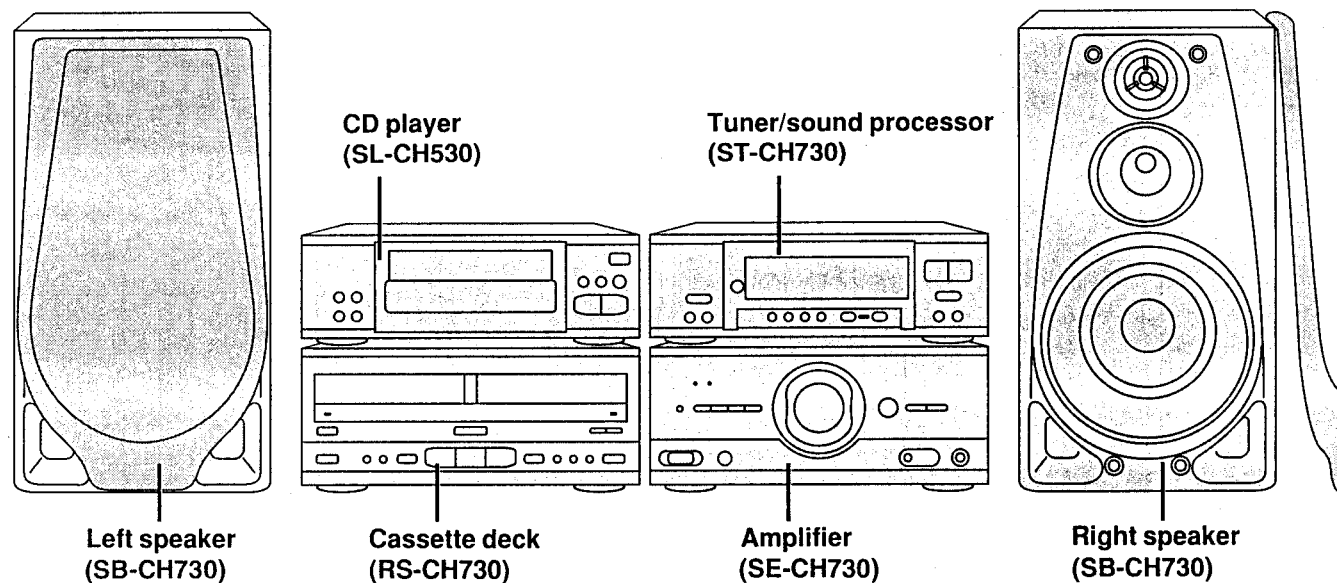
Technics®

SC-CH730

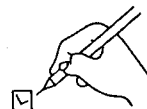
For operation and other details with regard to each component, please refer to the operating instructions.

STEP 1

Install the various components as shown below.

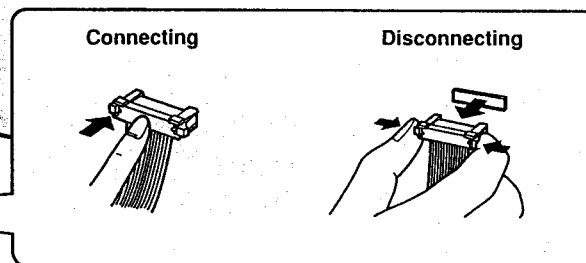
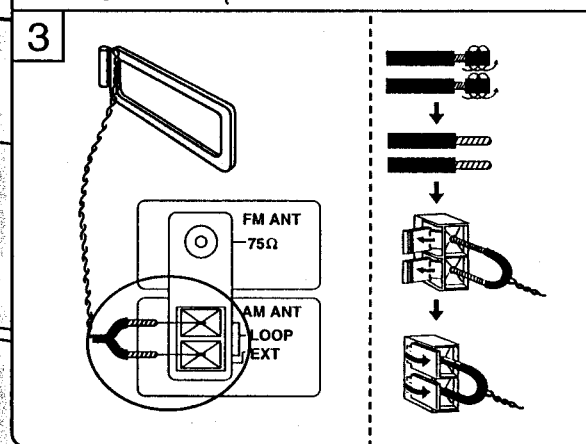
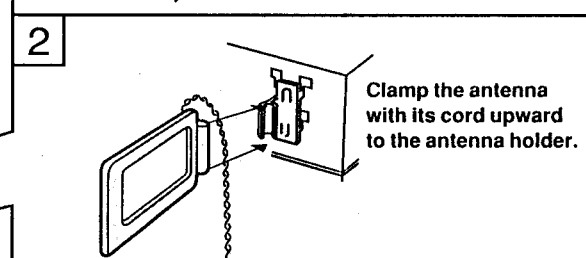
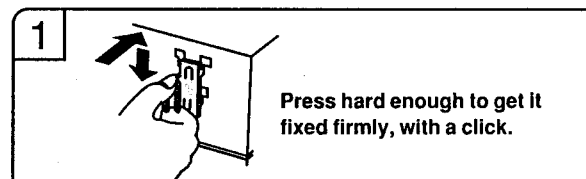
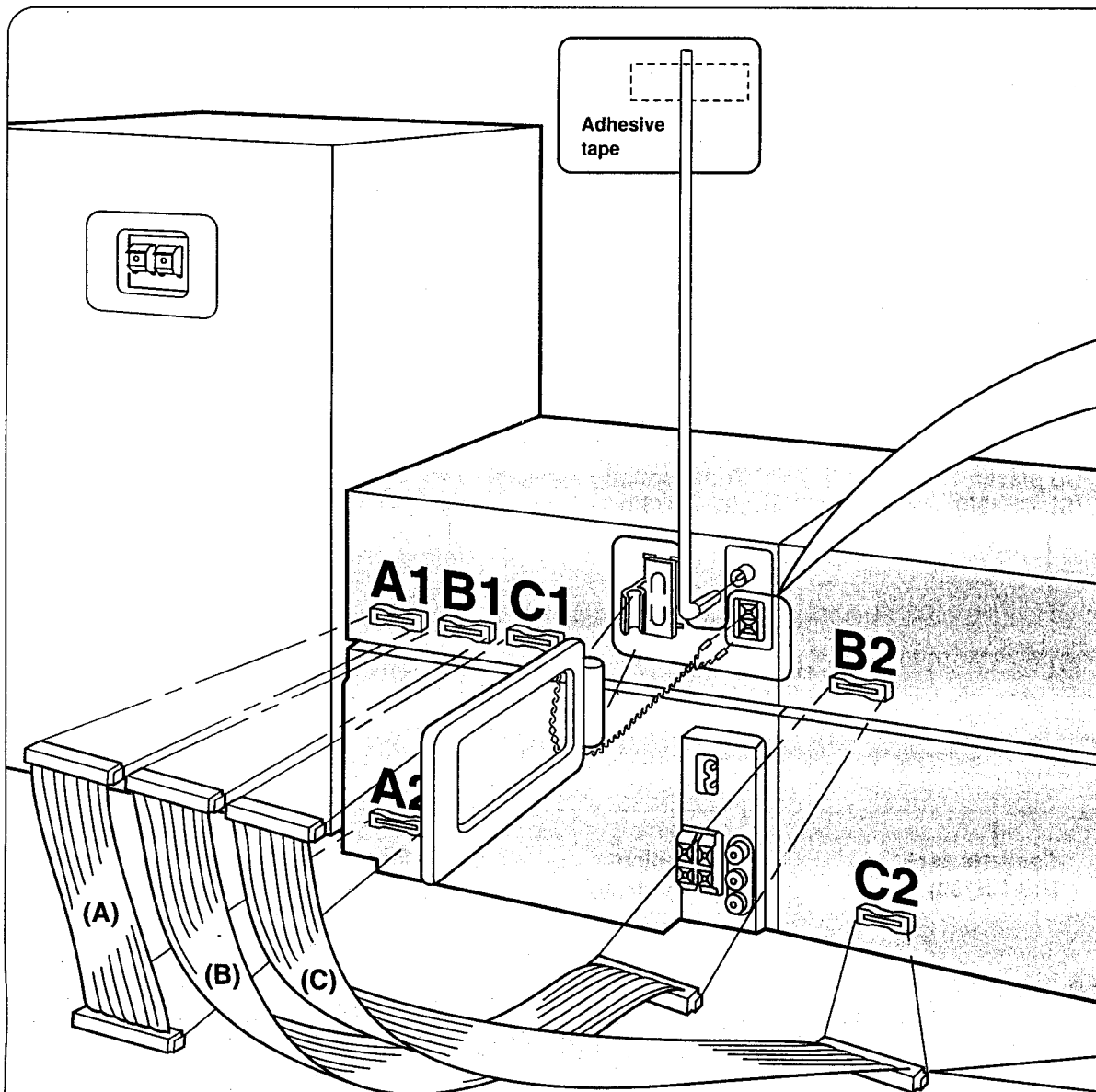
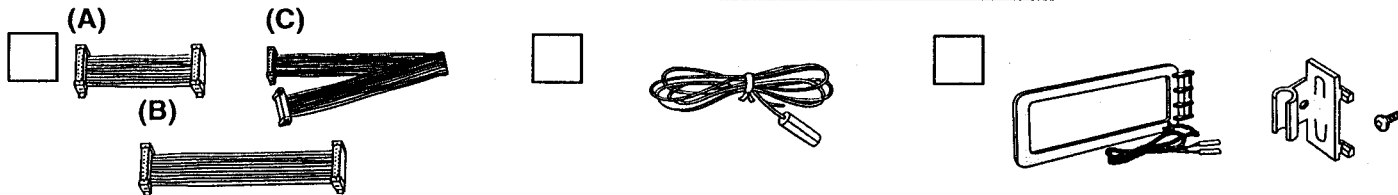


To stack the components vertically, refer to page 5 of the operating instructions.

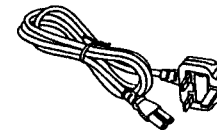
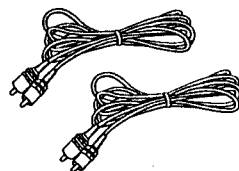
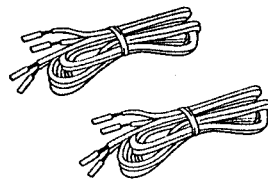


Before connecting the unit, check and identify the supplied accessories comparing to the illustrations at the top of each step (steps 2–3).

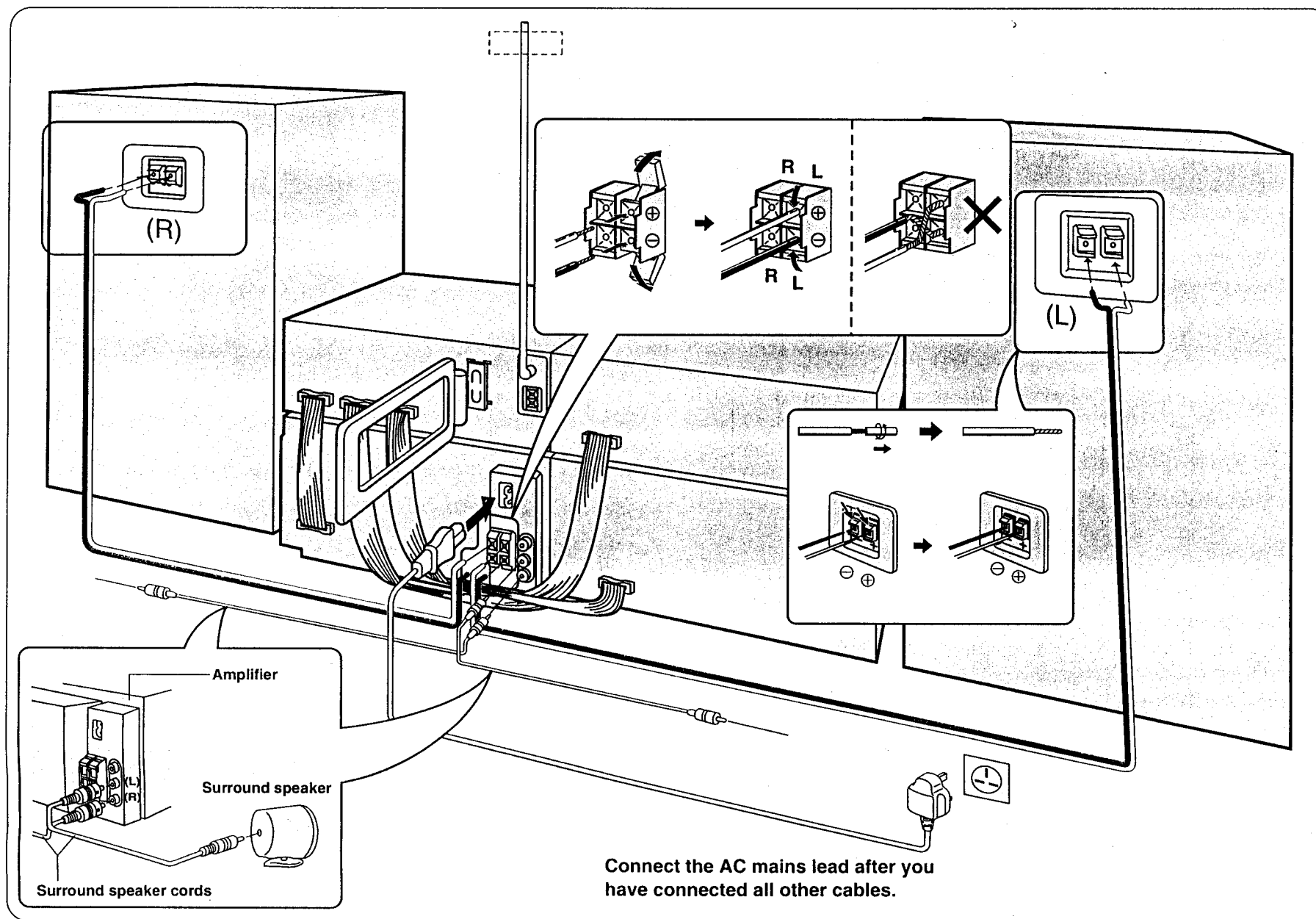
STEP 2



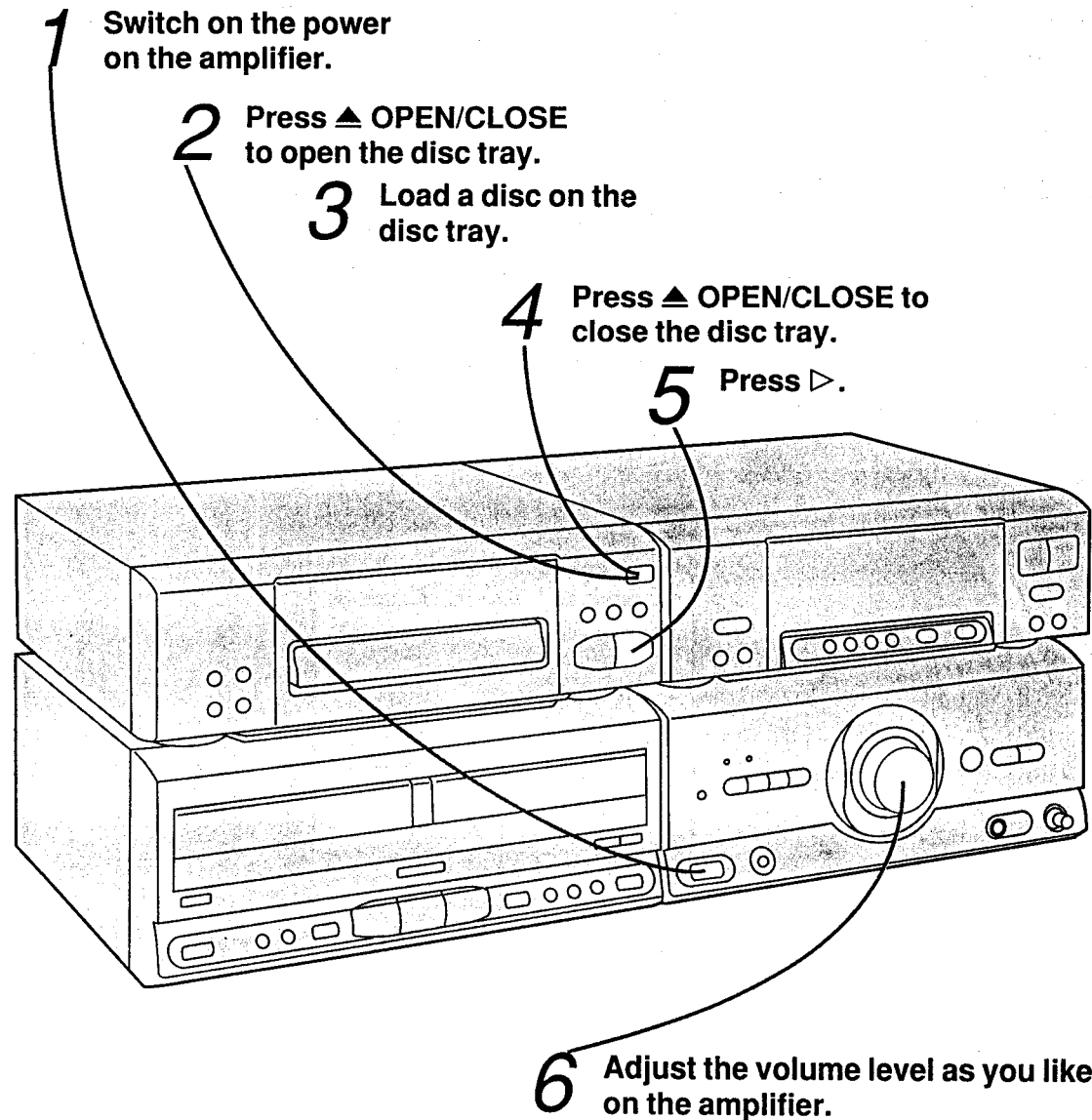
STEP 3



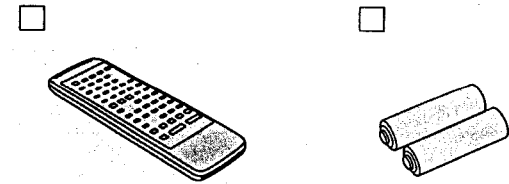
Antenna plug adaptor
(For FM outdoor antenna)
For the method of use, please
refer to page 7 of the operating
instructions.



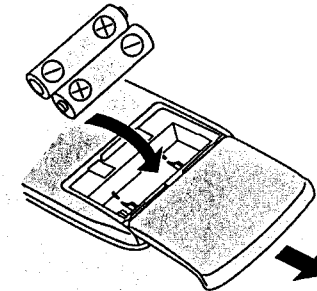
Check the installation by listening to a CD



Remote control operation



Battery installation



For details, please refer to page 5 of the operating instructions.

To adjust the left-right volume balance

Press one of BALANCE on the remote control.

